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## **Ecofeminism in India:**

From the Chipko Movement to the Case of  
Narmada Valley Development Project

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## **Abbreviations**

**ARCH** Action Research in Community Health

**DGSM** Dasholi Gram Swarajya Mandal

**FPC** Forest Protection Committee

**GDP** Gross Domestic Product

**ILO** International Labour Organization

**IMF** International Monetary Fund

**JFM** Joint Forest Management

**MAF** Million Acre Feet

**MP** Madhya Pradesh

**MW** Megawatt

**NAPM** National Alliance of People's Movements

**NBA** Narmada Bachao Andolan

**NCW** National Commission for Women

**NPRR** National Policy on Resettlement and Rehabilitation

**NVDP** Narmada Valley Development Project

**PAPs** Project Affected People

**R&R** Resettlement and Rehabilitation

**SSP** Sardar Sarovar Project

**VCs** Village Commons

**VPs** Van Panchayats

**WB** World Bank

**WCD** World Commission on Dams



## ABSTRACT

Dopo aver ottenuto l'indipendenza nel 1947, l'India ha intrapreso un processo di sviluppo economico sostenuto dal Governo Centrale. Tale processo ha portato con sé progetti su grande scala e ad alta intensità di capitale, costruzione di infrastrutture, e così via, incoraggiato dalle istituzioni finanziarie internazionali. Sviluppo diventava così sinonimo di crescita economica e industrializzazione; tuttavia, se da una parte ha beneficiato una ristretta élite, dall'altra si è accompagnato al degrado ambientale e all'impoverimento di gruppi sociali già svantaggiati, il cui 90% dipende da un'economia della terra. La gestione dell'ambiente e delle risorse naturali nel periodo precedente e successivo all'indipendenza indiana ha registrato una certa continuità, in quanto le pratiche di sfruttamento e subordinazione coloniali sono passate sotto il nome di politiche di sviluppo, questa volta formulate dal Governo Centrale e i diversi stati Indiani. I diritti di proprietà sui beni comuni e sulle risorse naturali sono stati trasferiti progressivamente dalle comunità rurali, al controllo dello Stato e di privati. Per questo motivo, i progetti di sviluppo e di modernizzazione territoriale, che hanno comportato la costruzione di grandi dighe o la deforestazione di intere aree abitate da comunità contadine, hanno avuto gravi conseguenze su tali comunità date le loro relazioni di interdipendenza con l'ecosistema naturale per soddisfare i bisogni primari. L'opposizione a tale modello di sviluppo si è automaticamente trasformata in una critica al fenomeno della globalizzazione economica e del degrado ambientale, alle istituzioni finanziarie internazionali e alle grandi multinazionali che hanno contribuito a una ulteriore polarizzazione tra Sud e Nord del mondo. Le risposte sono arrivate dalle vittime di tali politiche, quali contadini, indigeni, donne, e i poveri in generale, che si sono opposti attraverso azioni spontanee e forme organizzate di protesta, il cui obiettivo principale è stato il decentramento del potere e la riappropriazione dei diritti di proprietà sui mezzi di sussistenza. Un'analisi di genere del fenomeno rivela la stretta connessione tra le donne e l'ambiente naturale, che si rifà non solo alle peculiarità biologiche femminili, ma al loro legame materiale con la terra come fonte di sopravvivenza. Il sistema patriarcale che si nasconde dietro la conoscenza scientifica sviluppatasi tra il XV e il XVII secolo, e che ha legittimato una cultura riduzionista e meccanicistica, è stato denunciato e decostruito da esponenti di tali categorie svantaggiate e da esperti che ne hanno riconosciuto l'ingiustizia sociale e la parzialità nella distribuzione dei suoi "benefici". Le donne che hanno partecipato a tale critica

possono essere ricollegate al movimento ecofemminista, il quale ha individuato una stretta relazione tra femminismo ed etica ambientale, e che ricerca le radici (e le soluzioni) ad una oppressione sessista che diventa violenza nei confronti della natura e viceversa. Oltre al quadro teorico e interpretativo del fenomeno, sono state fondamentali le risposte di protesta provenienti dal basso, direttamente da coloro che hanno subito gli abusi di tali politiche che hanno annientato le basi materiali per la sopravvivenza, quali terre, acqua, foreste, etc. I movimenti di base locali in India, che hanno registrato una presenza massiccia di donne, si sono opposti attraverso l'azione diretta nonviolenta ai trasferimenti forzati dovuti alla costruzione delle grandi dighe, si sono opposti all'abbattimento degli alberi delle foreste da cui traggono sostentamento, hanno dimostrato di essere pronti a sacrificare la propria vita, in attesa che l'acqua di bacini artificiali arrivasse a sommergere le loro case. Il loro impegno per la protezione dell'ambiente e allo stesso tempo per i loro diritti, ha trasformato le loro battaglie in lotte per la giustizia ecologica e sociale. Le donne rurali nei paesi in via di sviluppo, possiedono una conoscenza e un'esperienza capaci di rovesciare questo approccio violento alla natura e alla vita stessa, attraverso il soddisfacimento dei bisogni primari e la sostenibilità ecologica.

Il primo capitolo di questa tesi comincia con una panoramica sulle teorie ecofemministe che spiegano i ruoli di genere e le strutture patriarcali che configurano le relazioni socio-economiche di una comunità. Partendo da un punto di vista universalizzante, i ruoli di genere sono stati giustificati dal determinismo biologico e posti nella sfera ideologica. Tuttavia il contesto sociale, storico ed economico di aree geografiche circoscritte, ha rivelato la necessità di approcci diversi per trattare l'argomento. Tra questi approcci, è possibile trovare l'ecofemminismo di Vandana Shiva, attivista indiana laureata in fisica nucleare che ha vissuto personalmente le prime agitazioni di donne nella regione del Garhwal Himalayano. La Shiva ha spiegato lo stretto legame tra donna e natura nelle comunità rurali indiane, non solo sulla base di antiche tradizioni e rievocazioni della cosmologia indiana, secondo la quale *Prakriti*, simboleggiante la natura è un'espressione del principio femminile *Shakti*, da cui scaturisce ogni forma di vita e per questo va preservato. Lei individua anche le radici storiche che hanno portato alla crisi ecologica e alla ulteriore marginalizzazione delle comunità rurali e della loro economia di sussistenza, fortemente legata all'ambiente circostante. Tali radici sono quelle del retaggio coloniale e la "distruttività" dei correnti sistemi di produzione capitalistici. Il concetto di sviluppo che si è andato affermando,



ovvero quello di crescita economica, presuppone che tutti i Paesi del mondo debbano percorrere un cammino che li condurrà alla ricchezza e al benessere in cui si trovano già i Paesi del Nord del mondo. Affinché questo cammino possa essere reso possibile, è necessaria una modernizzazione territoriale che passa attraverso quella che Walt Whitman Rostow ha definito teoria degli stadi. Tale teoria sviluppata nel corso degli anni '60, prevede cinque fasi di sviluppo in cui partendo da una condizione di totale assenza delle conoscenze scientifiche e tecnologiche (la società tradizionale) si arriva all'età del consumismo e della produzione di massa. Un modello di sviluppo tale ha presentato dei limiti nella sua formulazione, innanzitutto creando una dicotomia tra un *noi* ricco e sviluppato, e l'*altro*, povero e arretrato. Questa costruzione del concetto di sviluppo è servita poi per giustificare il paternalismo occidentale e le sue interferenze nei paesi del Terzo Mondo, soprattutto attraverso istituzioni economiche internazionali. Quello che viene criticato maggiormente dalla Shiva, è la convinzione di poter applicare questo paradigma di sviluppo a qualsiasi contesto sociale, economico, politico, culturale, nonostante l'impatto sui contesti sociali e ambientali in paesi come l'India sia stato negativo. Il risultato infatti è quello di una ulteriore polarizzazione e marginalizzazione dei gruppi più svantaggiati e uno sfruttamento non sostenibile delle risorse naturali. La Shiva parla allora di "malsviluppo", basato sulla scienza moderna che si rifà a metafore sessiste: la natura smette di essere organismo vivente e fonte di vita, diventando materia inerte e fonte di profitti nelle mani dell'uomo; alla sottomissione della natura si accompagna quella della donna, la cui stretta relazione con la natura, in questo caso nelle società contadine indiane, da cui trae sostentamento, la relega nella sfera "invisibile" dell'improduttività (in senso economico) e dell'ignoranza (in senso scientifico e tecnologico). La Shiva rivela il paradosso di questi assunti, essendo la natura per prima a crearsi e ricrearsi con i suoi cicli di rigenerazione, così come la donna che possiede una conoscenza profonda della natura e pratiche sostenibili e rispettose dell'ambiente. Il recupero del principio femminile, *Prakrti* nella cosmologia indiana, è la soluzione al progetto patriarcale del "malsviluppo". D'altro canto, l'ambientalismo femminista proposto da Bina Agarwal, economista indiana e professoressa di Sviluppo Economico e Ambientale all'Università di Manchester, rivela uno scenario più approfondito rispetto alle teorie della Shiva su come le donne e gli uomini si rapportano alla natura a seconda della distribuzione economica, di potere, e dei diritti di proprietà. L'oppressione della natura e della donna, le gerarchie di genere, vanno contestualizzati a seconda delle

dinamiche culturali, politiche, economiche di una data comunità, così come possono variare a seconda della classe, dell'etnia, dell'educazione, etc. Il determinismo biologico che avvicina la donna alla natura, in questo senso pecca di essenzialismo. Nel caso delle società rurali, tribali indiane, le donne si occupano dell'economia di sussistenza della propria casa e della comunità; sono esperte di pratiche agricole sostenibili, poiché dipendono dall'ambiente circostante per i loro mezzi di sussistenza e devono per questo preservarne l'integrità. È una questione di sopravvivenza. Da questo punto di vista, come afferma la Agarwal, le donne sono al tempo stesso vittime del degrado ambientale, perché le prime a trarne sostentamento, ma allo stesso tempo con le loro conoscenze, sono potenziali agenti di cambiamento, poiché possiedono tutti gli strumenti per proporre modelli alternativi al "malsviluppo" citato da Vandana Shiva. Questa base materiale su cui si fonda l'approccio della Agarwal, determina le diverse risposte degli uomini e delle donne alla crisi ecologica. Un esempio di tali risposte è dato dai casi specifici analizzati nei capitoli successivi.

Il secondo capitolo è dedicato ad uno dei primi movimenti sociali che hanno registrato un'alta partecipazione delle donne, il movimento Chipko (*Chipko Andolan*). Il movimento Chipko, dall'hindi "abbracciare", ha utilizzato la strategia dell'abbraccio per proteggere gli alberi dall'abbattimento a scopi commerciali. Nell'India post-indipendenza l'opposizione al dominio britannico non si è accompagnata ad una opposizione alle pratiche forestali e agricole coloniali, cosicché la logica del capitalismo coloniale basata sul depredamento delle risorse è stata fatta propria dallo Stato e da privati. Quando la crisi ecologica e l'ingiustizia sociale hanno raggiunto il picco negli anni '70, gli abitanti dei villaggi erano già a conoscenza della relazione causale tra l'uso improprio delle foreste e i devastanti effetti sull'ecosistema. La presenza delle donne si spiega in quanto la base materiale per soddisfare le quotidiane necessità di sussistenza per loro e il nucleo familiare, venivano severamente minacciate. Erano le donne a svolgere il lavoro sui campi, a occuparsi della trasformazione delle risorse naturali in cibo o combustibile, a prendersi cura del bestiame, etc. Per cui sono state loro le prime vittime dei disastri ambientali. In quanto esperte di botanica e silvicoltura nel rispetto dell'ambiente, hanno percepito la necessità di usare le loro conoscenze e la loro saggezza per salvaguardare l'habitat naturale. Pilastri di tale movimento, che hanno creato il contesto da cui donne e attivisti in generale hanno tratto ispirazione, sono state le due donne inglesi discepole di Gandhi, Mira Behn e Sarala Behn.

Mira Behn, nata come Medeleine Slade (1892-1982), arrivava in India nel 1925 per unirsi alla lotta di Gandhi per l'Indipendenza. Viaggiando nel nord del paese, ha cominciato a studiare le cause di violente e ricorrenti inondazioni e frane nelle colline himalayane in seguito alle politiche di sfruttamento dell'acqua e delle terre. Denunciò la trasformazione di foreste miste naturali in monoculture destinate al mercato, che avevano provocato il degrado del terreno e l'ulteriore impoverimento di chi dipendeva da esso; in particolar modo denunciava la conversione di specie autoctone di querce in monoculture di pini, più richieste dal mercato perché fonte più ricca di legname e resina. Mira Behn fece presente che le querce erano ecologicamente più adatte in quanto migliori per il contenimento dell'acqua, la stabilizzazione del terreno e la capacità di produzione di humus, per cui il loro abbattimento avrebbe portato (così come successe) ad una pericolosa esposizione della terra agli agenti atmosferici. E questo rappresentava solo uno dei modi attraverso cui le comunità locali perdevano il controllo delle foreste. Si batté affinché venisse ristabilito l'habitat originale delle foreste di querce, affinché i contadini locali fossero maggiormente coinvolti per ottenere delle pratiche equilibrate e sostenibili non solo a livello ambientale ma anche per una maggiore equità sociale. Mira Behn è stata tra le prime a promuovere la sensibilizzazione ecologica tra le comunità dell'Uttarakhand (Stato federato dell'India dove nasce il movimento Chipko istituito nel 2000, che all'epoca faceva parte dello stato dell'Uttar Pradesh nell'India settentrionale), e ad incoraggiare la partecipazione democratica per la gestione delle risorse naturali. Se da una parte fu lei a fornire le basi teoriche e concettuali del movimento Chipko, dall'altra fu Sarala Behn a creare una struttura organizzativa attraverso il potere delle donne. Sarala Behn, nata Catherine Mary Heilman (1901-1982), si trasferì in India nel 1932. Visse lì per cinquanta anni, cominciando con il supporto alla lotta gandhiana per l'indipendenza, per poi dedicarsi ad una istruzione olistica dei gruppi sociali meno favoriti basata sul principio pedagogico gandhiano del *Nai Talim* ("Nuova Educazione" basata sul lavoro manuale), al rispetto dell'ambiente, e all'emancipazione delle donne nell'Uttarakhand. Colpita dalle vicende ambientali e da come la natura circostante venisse devastata (negli anni '70 delle frane ebbero disastrose conseguenze nell'Uttarakhand: nel 1970 una grande frana bloccò il fiume Alaknanda che portò all'inondazione di 1000 km di terra, distruggendo strade e ponti; nel 1978, il fianco di una montagna franò nel Bhagirathi, che inondò la valle gangetica), Sarala Behn concentrò il proprio attivismo sulla protezione delle foreste. Scrisse molti articoli in cui introduceva il concetto di

scienza ecologica e mettendo in primo piano le relazioni di interdipendenza della biodiversità, in particolar modo tra l'uomo e la natura, e soffermandosi sulla tesi che prima di essere fonte di risorse per la produzione industriale, le foreste fossero il fondamento della stabilità ecologica e di conseguenza di quella umana. L'evoluzione del movimento Chipko si ebbe sotto la guida di Sarala Behn che coinvolse le donne delle colline nella lotta per i diritti della foresta, fondando nel 1961 l'*Uttarakhand Sarvodaya Mandal*. I principali problemi affrontati erano l'abuso di alcool da parte degli uomini, i diritti di accesso alle terre, lo sviluppo di piccole industrie forestali locali. Attraverso metodi di protesta nonviolenti, lunghe marce e il passaparola tra gli abitanti dei villaggi, il coinvolgimento delle comunità nella regione himalayana del Garhwal (che insieme alla divisione del Kumaon forma lo stato dell'Uttarakhand), è diventato sempre maggiore. Il movimento Chipko emergeva quindi da un contesto di attivismo già avviato. Nel 1973, data in cui si identifica la nascita del *Chipko Andolan*, già più di cento villaggi erano coinvolti nella protesta contro le politiche del Dipartimento Forestale. È possibile distinguere due fasi dell'azione Chipko, la prima in cui gli interessi degli uomini e delle donne delle comunità collinari coincidevano, opponendosi congiuntamente alla pratica del Dipartimento Forestale di conferire l'appalto a ditte esterne per il taglio dei loro alberi. Quando furono anche gli uomini delle comunità locali ad abusare delle risorse forestali, le donne acquisirono maggiore indipendenza rivelando il conflitto di interessi per la gestione delle foreste, che vedeva da una parte la loro percezione della foresta come fondamento della sussistenza locale, e dall'altro l'interesse per le materie prime e i profitti da poterne ricavare. A Reni, le donne Chipko utilizzarono per la prima volta la strategia dell'abbraccio, per impedire l'abbattimento di 2500 alberi. L'impatto mediatico fu incredibile, il gesto dell'abbraccio inteso come resistenza passiva a politiche ingiuste, fece del Chipko un'icona ambientalista a livello non solo nazionale ma anche globale. Nel 1980, la massiccia partecipazione alle proteste contro le pratiche di disboscamento portò l'allora Primo Ministro Indira Gandhi ad emanare un divieto di 15 anni per l'abbattimento di alberi a scopo commerciale nell'Uttar Pradesh. Il successo di Reni fu seguito da molte altre manifestazioni pubbliche da parte delle donne nelle colline himalayane, che portò ad una nuova percezione del loro ruolo, anche da parte della leadership maschile. Da partecipanti silenziose, le donne hanno trovato il coraggio di far valere il proprio ruolo come maggiori responsabili nelle pratiche di sussistenza, diventando agenti attivi nel rovesciare i modelli prevalenti di gestione dell'ambiente e delle strutture sociali delle

loro comunità. L'importanza del movimento Chipko si può spiegare attraverso il successo nell'ottenere il divieto di disboscamento; l'inclusività della sua struttura organizzativa; l'ampliamento dei suoi obiettivi, partendo dalla riappropriazione delle risorse naturali infatti è diventato un movimento ambientalista per promuovere la sensibilizzazione riguardo la crisi ecologica. Per il suo contributo alla salvaguardia delle foreste himalayane ed esempio per il resto del mondo, il movimento Chipko ha ottenuto il Right Livelihood Award (conosciuto come il Nobel alternativo), nel 1987.

Nel terzo capitolo, il secondo studio di caso riguarda il *Narmada Bachao Andolan* (NBA -Save the Narmada Movement), fondato negli anni '80 dall'attivista Medha Patkar, la quale ha avuto il merito di riunire Adivasi (popolazioni tribali dell'India), Dalit ("intoccabili"), contadini, braccianti senza terra, artigiani, pescatori, attivisti, studenti, e così via, attraverso i tre stati del Gujarat, Madhya Pradesh a Maharashtra nella lotta contro le dighe e la salvaguardia del fiume Narmada. La protesta è cominciata dalla necessità di ottenere un'informazione trasparente riguardo al progetto di sviluppo della Valle del Narmada, un progetto idroelettrico su larga scala che prevedeva la costruzione di 3000 piccole dighe, 135 medie e 30 grandi. Gli impatti devastanti di tale progetto, e in particolar modo della diga più grande, la *Sardar Sarovar*, sulle comunità rurali più povere e soprattutto sui tribali (gli Adivasi, che costituiscono l'8.6% dell'intera popolazione indiana, rappresentano il 40% dei più di 20 milioni di persone costrette a trasferirsi per i progetti di sviluppo in India), e sull'ambiente circostante da cui questi dipendevano, sono stati celati dalle promesse del Governo di una maggiore fornitura di acqua per l'irrigazione ed energia elettrica. Tuttavia, il prezzo ecologico e sociale ha di gran lunga superato i benefici sperati, rappresentando una perdita del tutto simile a quella del movimento Chipko in termini di risorse naturali e mezzi di sostentamento gestiti esclusivamente dalle donne delle comunità coinvolte. Nasceva così il *Narmada Bachao Andolan*, sotto la guida di Medha Patkar e altri attivisti come il gandhiano Baba Amte, che hanno lottato inizialmente per un equo compenso e adeguate politiche di reinsediamento e riabilitazione di tutti coloro che indipendentemente da ceto, casta, genere ed etnia sarebbero stati costretti ad abbandonare le proprie case e le proprie terre, perché sommerse dai bacini artificiali, soprattutto da quello della mega diga *Sardar Sarovar*. Con l'inizio dei lavori della mega diga, sono cominciati anche i *satyagraha*, la resistenza pacifica delle comunità colpite. Patkar mobilizzò l'opinione pubblica attraverso marce e manifestazioni nonviolente; nonostante ciò, fu più volte malmenata ed arrestata dalle forze di polizia. Si era unita alla popolazione tribale,

decidendo di vivere al loro fianco nella Valle del Narmada, rimase con loro per resistere all'evacuazione forzata dalle loro case, rischiando la propria vita in villaggi che sarebbero stati presto sommersi. Il NBA riuscì a bloccare, anche se temporaneamente, la costruzione della diga *Sardar Sarovar* quando la Corte Suprema decise di sospendere i lavori finché tutti gli sfollati non avessero ricevuto una terra come compenso; ma soprattutto la sua influenza è stata tale da far sì che la Banca Mondiale ritirasse nel 1991 il proprio prestito di 450 milioni di dollari concesso nel 1985. Un grande momento di notorietà del movimento, soprattutto in Occidente, si è registrato quando la scrittrice e attivista indiana Arundhati Roy scrisse "La fine delle illusioni" (*The Cost of Living*, 1999) in cui affronta il tema del progetto di sviluppo della Valle del Narmada, che con le sue centrali idroelettriche e le sue dighe ha avuto un impatto devastante sulle popolazioni coinvolte. Con questo saggio, la Roy denunciava il Governo Indiano sottomesso agli interessi della Banca Mondiale e dell'occidente. Lei stessa nel 2002 è stata condannata dalla Corte Suprema per oltraggio alla corte stessa, ad una pena simbolica di un giorno di detenzione. Il suo coinvolgimento nelle manifestazioni del NBA ha attirato l'interesse della stampa internazionale sulle vicende del fiume Narmada, i rischi ecologici e la violazione dei diritti umani delle persone coinvolte. Nonostante ciò, la costruzione della *Sardar Sarovar* è continuata; l'ordine della Corte Suprema di compensare gli sfollati con la terra non è stato rispettato, in quanto solo in pochi casi questi ultimi hanno ricevuto una terra coltivabile e in grado di sostituire quella persa; molti tra i più poveri si sono ritrovati a vivere ai margini della società, nelle bidonville dei centri urbani. Secondo le stime del NBA le dighe hanno avuto conseguenze irreversibili sulla vita di mezzo milione di persone. Nonostante il movimento non sia riuscito a bloccare il progetto, ha avuto il merito di creare una rete di sostegno che è stata grande esempio di resistenza popolare.

I due casi del *Chipko Andolan* e del *Narmada Bachao Andolan* sono esempi di come le condizioni dei gruppi meno favoriti, in particolar modo quello delle donne, non li relega necessariamente ad una posizione di dipendenza e vittimismo. Al contrario, tali difficoltà hanno dato loro l'opportunità di reagire, portando alla luce le potenzialità fino a quel momento inesprese nel contestare i modelli di sviluppo economico dominanti e le politiche governative. La loro conoscenza, non riconosciuta come "scientifica" dagli esperti, ha rivelato un paradigma valido e alternativo per vivere in armonia con la natura, contrapposto quindi alla violenza distruttiva del "malsviluppo" (Shiva, 1989), e che ha rappresentato un riscatto dei tribali e della popolazione rurale indiana.

## INTRODUCTION

After 1947, when India gained independence, it undertook the modern development process backed by the Central Government. Large-scale and capital-intensive projects have characterized this process, with the aid of international institutions helping infrastructure construction, especially for increasing agricultural productivity. Development became synonymous for economic growth and industrialization. This kind of development, while enriching narrow elites, has destroyed natural environments and impoverished Indian people, 90% of whom is dependent on land. The colonial and post-independent India experienced continuity in policy formulation of environmental management. Property rights regarding village commons and forests passed from rural communities control to State and private individuals one. As a matter of fact, it had a serious impact on poor rural communities, due to their dependence on such resources for satisfying their basic needs. At the international level, the natural environment degradation became an issue felt worldwide, especially after the United Nations Conference on the Human Environment that took place at Stockholm in 1972, which set the stage for a new environmental political agenda, which led to the Brundtland Commission definition of sustainable development: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs". However, the spread of neoliberalism and economic globalization supported by international institutions and multinationals, and the resulting growing ecological degradation in the South, revealed the failure of the development model. In response to this global pattern, the most disadvantaged, such as peasants, indigenous, women, and the poor in general aroused through spontaneous actions and organized struggles. They locally opposed deforestation, large-scale infrastructures projects in order to decentralize power and re-appropriate the natural resources and their right to life. A gendered analysis of this phenomenon revealed the connection between women and natural environment, rooted not only in the ideological sphere of women closeness to nature for their biological abilities, but in their material link with the Earth as a source of life. The global South and feminist experts recognized the dominant patriarchal system, which lies behind a scientific knowledge developed during the 15<sup>th</sup> and 17<sup>th</sup> centuries that justified a reductionist and mechanistic culture prevailing in the past and current

centuries. Grassroots movements, with the massive presence of women, aroused opposing forced displacement due to big dams, deforestation, structural adjustment programs all supported by international institutions, like the World Bank. Their commitment to environmental protection, and at the same time for their rights, made their struggles both social and environmental ones. Rural women have the knowledge and the experience to reverse the dominant violent technological approach to life, based on basic need of the community and ecological sustainability. In India, the struggles for nationalism, together with peasant's struggles for their rights provided the background for women's activism. The preexisting social hierarchies by gender, class, caste, and ethnicity have been strengthened in the post-colonial period. Strong responses came from different areas of the country: namely, the *Chipko Movement* in the Himalayan hills of Uttar Pradesh, and the *Narmada Bachao Andolan* (NBA) in the Narmada Valley, across the three states of Gujarat, Maharashtra, and Madhya Pradesh. The joint approach to ecological and gender issues allowed the possibility to revise the foundations of development pattern, redistribution, and institutional transformation; bottom-up actions have been critical for women to give voice to their demands.

The main difficulty in producing this work has been to find the relevant material. It must be said that there exists a broad range of literature on the historical facts and detailed reports on development projects implemented in India in the course of the last century, especially from electronic scholarly resources. However, the difficulty has been to extrapolate a reading key from a gender perspective. In this case academics works, publications, interviews especially of Indian activists, Professors, economists, and so on has been helpful in providing the theoretical foundations to apply to the analyzed issues. The two case studies – the Chipko Movement and the NBA, are important as examples of how women's conditions, as well as those of the most disadvantaged groups, do not necessarily confine them in a position of dependence and victimhood. On the contrary, hardships gave them the chance to counteract, showing their invisible potentiality to reverse, even if not always successfully, the prevailing development patterns. Their knowledge, not recognized as “scientific” by experts, revealed an alternative way to live in harmony with nature, in opposition to the violent destructiveness of the *maldevelopment* (Shiva, 1989). The two case studies served and will serve to encourage women's activism in environmental conservation by prompting them to participate in projects, policies, and programs to reduce gender



inequalities and create an inclusive network of advocates to preserve the ecological balance. Women's major role as resource managers, social activists, ecological advocates must be taken into account when development projects are designed. Environmental education must be encouraged, as well as women participation in the decision-making process, which could be the solution for bridging the gap between development as economic growth and effective sustainable development.

In regard to this dissertation and the specific cases discussed, it is helpful to remind some of the problems posed by Bina Agarwal in addressing woman/nature oppression: social and cultural constructs behind the logic justifying this kind of oppression cannot be universalized. Even if the presumed inferiority of woman/nature is a "pan-cultural fact" (Sherry B. Ortner, 1974), it does not automatically mean that it is similarly expressed worldwide, but it varies from culture to culture, according to a complexity of factors such as historical period, cultural inheritance, political structures, and so on. In the last chapters, it is convenient to refer to this reading key to understand the contextualized actions of resistance movements analyzed. To conclude, the ultimate purpose of my thesis is to present the evolution of women's activism in post-independent India, their commitment to the environmental cause, which brought about a revolution in women's social role and patriarchal structure of Indian rural communities.



# CHAPTER I

## Ecofeminism in India

### 1. Introduction: Environment versus Development

In the 1970s, the natural environment degradation became an issue felt worldwide. The United Nations Conference on the Human Environment that took place at Stockholm in 1972, set the stage for a new environmental political agenda, which led to the Brundtland Commission's<sup>1</sup> definition of sustainable development: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

The need to reconcile wealth with ecology took hold in response to the spread of neoliberalism and economic globalization supported by international institutions and multinationals and the resulting growing ecological degradation. The definition of the Brundtland Commission put forward two fundamental concepts about development: that of *needs*, especially the basic ones for the poor; that of *limits*, regarding the endless exploitation of nature to be limited for the good of future generations. Some stages in those years contributed to create a kind of awareness about deterioration of nature: in 1973 the oil shock encouraged recourse to nuclear power projects. The perception of scarcity of resources spread through academic works such as *The Limits of Growth*, promoted by the Club of Rome in 1972. It demonstrated how the existing consumer society would lead to a crisis for lack of resources considering the input, in its economic sense, insufficient in respect to the exponential growth of some variable factors such as population growth, pollution, food provision, resources exploitation, and technology fostering industrialization. A further stage involving people worldwide in environmental cause was Rachel Carson "Silent Spring" (1962). Modern ecologist movement finds seeds of its core issue in the work of Carson who denounced human arrogance to treat nature as an endless resource backed by a *scientific rationality*. The disaster of Love Canal increased awareness about the adverse effects on human health due to the misuse of environment. Love Canal project was initiated in 1890 and consisted of an artificial canal and a model community near Niagara Falls, New York. However, the project failed and the canal was used from 1920s to 1950s as a dump

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<sup>1</sup> World Commission on Environment and Development (WCED)

by the Hooker Chemical Company. When the dump was closed, Niagara Falls municipality began to construct schools and houses on the area. In the 1970s, the children born there encountered increasingly often malformation. Studies and research concerning the storage of toxic waste revealed the connection with malformation and leukemia cases. Protests led by women affected by abortion and fetal abnormalities made Love Canal become a national issue, being a tragedy for hundreds of its residents.<sup>2</sup> Seveso disaster in 1976, Chernobyl disaster in 1986, caused a spontaneous opposition from women against industrial systems. Link between pollution of nature, women health, and hence their children's health and so on, became clear. The "corporate and military warriors' aggression"<sup>3</sup> was interpreted as a violence against female body. This way feminism went beyond the traditional biological determinism in favor of a more comprehensive approach and understanding of ecology processes and links with female nature. The first ecofeminist conference, "Women and Life on Earth: Ecofeminism in the Eighties" took place at Amherst, Massachusetts (US), in 1990. It inspired a growing participation of women in actions and associations against militarization, patriarchy, racism, environmental degradation. Thus, ecofeminism was born in the West as a result of feminist and ecology issue merger for peace.

Representatives of ecofeminism has not been only in the global North. In fact, women from the Third World have been creating bottom-up networks to raise consciousness about importance of nature as integral part of human lives. In Africa, the first African woman to receive a Nobel prize was Wangari Maatha, a Kenyan humanitarian and environmentalist who fought, despite intimidation and acts of violence, for sustainable development and democracy. She founded the *Green Belt Movement* to support women's rights, biodiversity and reforestation.<sup>4</sup> In India, a women's movement that became internationally renowned took root: *Chipko* women appeared in black and

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<sup>2</sup> Brook, Marisa. *The tragedy of the Love Canal*. HS4U, 2007. [http://wakeupniagara.weebly.com/uploads/7/2/3/7/7237922/the\\_tragedy\\_of\\_the\\_love\\_canal.pdf](http://wakeupniagara.weebly.com/uploads/7/2/3/7/7237922/the_tragedy_of_the_love_canal.pdf) Accessed 19 January 2017

<sup>3</sup> Seema. Eco-feminism and environmental movements in India. *International Journal of Current Research* Vol.6, Issue,01, January 2014  
<http://www.journalcra.com/article/eco-feminism-and-environmental-movements-india> Accessed 9 January 2017

<sup>4</sup> The Green Belt Movement <http://www.greenbeltmovement.org/wangari-maathai> Accessed 19 January 2017

white photos hugging trees against destruction of their Himalayan forests.

### 1.1. Environmental movements in India

Early manifestations of women's movements in India, emerged in the context of anti-colonial struggle. Until this moment, women's participation was null in environmental and social rights debates even if they were committed to the philosophies of *Brahmo Samaj*<sup>5</sup> or *Satyashodhak Samaj*<sup>6</sup>, among others. In the second half of 19<sup>th</sup> century, with the emergence of Indian nationalism, women joined the civil disobedience and non-violent movement led by Gandhi for the national liberation of India.

Women's movements for lands rights in the anti-colonial struggle left a legacy of strong commitment to the postcolonial period campaigns. Struggles dictated by resource exploitation, forest, and water depredation, often in regard to large scale development projects, aroused to oppose the serious consequences they had on most disadvantageous groups: poor farmers, Dalits<sup>7</sup>, Adivasis<sup>8</sup>, and women. Since the early 20<sup>th</sup> century opposition came from communities mobilizing against colonial policies of resource exploitation: the Drainage Committee of 1907 or the Flood Committee of 1928, demonstrated the devastating impact of projects on population; from 1947 Kapil Bhattacharaya, the West Bengal government's chief engineer warned that dams, roads and bridges would damage seriously environment and its population<sup>9</sup>. Such conditions led to the formation of groups and projects such as the *Chipko Movement*, later discussed, opposing forest destruction; *Save the Bhagirathi*, which opposed the implementation of hydro-power projects on river Bhagirathi; the *NBA* (Narmada Bachao Andolan), which fought against massive displacement caused by damming the Narmada river; the *Appiko Movement* in the Southern India, inspired by Chipko to save

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<sup>5</sup> Brahma-Samaj is a movement founded in 1828 by Raja Ram Mohan Roy (1774-1843). Its main objective was to allow men and women forcibly converted to another religion, to regain their Hinduism; it preached the gospel of truth, love, and virtue and was strongly anti-caste system; it supported equality to men and women within marriage.

<sup>6</sup> Founded by the Indian activist Jyotirao Govindrao Phule (1827 – 1890), it aimed at the eradication of untouchability, women's emancipation, and anti-caste system.

<sup>7</sup> Untouchables.

<sup>8</sup> Original dwellers.

<sup>9</sup> Rao, J. Uma. *Displacement and Protest Movements-The Indian Experience*. International Journal of Modern Engineering Research (IJMER) Vol. 3, Issue. 3, May-June, 2013.

their forests; the opposition to the Silent Valley Project against the dam building on river Kuntipuzha in Kerala's Palghat district, to preserve surrounding rain forests; and so on.

After Independence, India undertook a process of rapid economic growth. It aimed at progress through industrialism and large-scale projects, symbols of development. Notwithstanding the endless degradation and pollution caused by this kind of development patterns, as well as their negative impact on Project Affected People, they had been legitimized in the name of common good. As the then Prime Minister Indira Gandhi wrote to the social activist Baba Amte, in 1984, in the context of the struggle against the Sardar Sarovar Dam, which was displacing thousands of people from the Narmada Valley:

“I am most unhappy that development projects displace tribal people from their habitat, especially as project authorities do not always take care to properly rehabilitate the affected population. But sometimes there is no alternative and we have to go ahead in the larger interest”<sup>10</sup>.

Women's role in environmental movements is strongly associated to the dichotomies violence vs. nature/violence vs. women. In India, the struggle assumed Gandhian non-violent and non-cooperative method of protest. Indian social movements managed to merge together gender and environmental issues by supporting the vision of a wholeness that every human being is part of.

## **1.2. Development Narrative**

To understand the context in which Ecofeminism developed its discourse and its action in India, it is important to briefly revise the development discourse in the globalization context. Development is a complex issue to define due to its mutability in different times of history. From its original meaning, a biological one that is being born and gradual evolution, development came to be known as a metaphor of growth measured by too often partial and inaccurate indicators determining countries wealth. The most exemplary indicator of growth is the Gross Domestic Product, which captures all final goods and services in the market of a country produced in a specific period. On the one hand, there is no doubt about utility of GDP in determining the economic

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<sup>10</sup> Edward Goldsmith and Nicholas Hildyard Ceds. *The Social and Environment effects of large Dams*. Vol-II p.245, as quoted by Smithu Kothari, in *Whose Nation? The Displaced as Victims of Development*. EPW Vol 31 (24). Page 1476 at Page 1477

performance of a country and hence an *economic* growth. On the other, when it is used to define development some specifications should be made. It is difficult to find a universal definition of well-being, but what is certain is that economic growth is not sufficient to reach it. Other elements such as social relations, equity, environmental respect, among others, made the difference.

The traditional concept of development, following the Rostow<sup>11</sup> stages of economic growth model, can be referred to the territorial modernization that relates directly to the growth issue. Foundations of modernization are capital accumulation, construction of major infrastructures, big industries, development of consumerism culture. Each society necessarily passes through one of the five evolving stages inevitably leading to the final phase where Western Countries are. These five stages imply:

- 1- *Traditional Society*; the main characteristics are the absence of modern science and technology. They are pre-Newtonian societies<sup>12</sup>, being Newton a turning point for men who become aware about laws governing nature and how to manipulate it. Productive activity is limited without technology progress, yet most of the resources come from agriculture. Society is organized around families ties and possession of lands. When talking about traditional societies, they refer to dynasties in China, the medieval Europe, the Middle East and Mediterranean, but also post- Newtonian societies which did not triggered the second stage of growth<sup>13</sup>:
- 2- *Preconditions for take-off*, transition is initiated. Agriculture becomes more productive, capital is accumulated, cities and industries expand. A new culture replaces the pre-existing one and it is based on entrepreneurship. Such process takes root in the 17<sup>th</sup> century Western Europe, when modern science is set to pervade economy and societal organization. Notwithstanding the persistence of traditional values, changes in trade modalities occur and new key words come to the fore such as profits and modernization. Internal and external trade develop and establish North-South relationships having the former an economic

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<sup>11</sup> Walt Withman Rostow (October 7, 1916 – February 13, 2003). United States economist and political theorist.

<sup>12</sup> W.W. Rostow, *The Stages of Economic Growth: A Non-Communist Manifesto*. Cambridge University Press, 1960.

<sup>13</sup> Ibid.

interest in the resources of the latter. Colonial powers coexist with traditional societies and arrive first to the third stage of growth.

- 3- *Take-off*; it is the process of economic acceleration. Society and its institutions are governed by economic progress: production activities are more efficient, investments in transport, communications, technology, and resources increase, industries expand through subsidiaries as well as urban areas, agriculture is industrialized at the expenses of peasants. Even the political power begun to regard to economic progress as a political issue to support, for general welfare. Historically, Britain is the first the experience the take off at the end of 17<sup>th</sup> century and early 18<sup>th</sup> century, followed by the United States, Germany, Japan, and Russia. In the 1950s China and India recovered land in the scale of economic growth.
- 4- *Maturity*; industrial growth process continues, technology innovations spread, production processes become more complex, cities and infrastructures increasingly develop. Institutions and societies are drafted to support economic growth.
- 5- *Age of high mass consumption*; when in 20<sup>th</sup> century, global North societies reach maturity, per capita income raise to a level that the consumption model goes beyond basic needs such as food and clothes.<sup>14</sup> Companies invest on product standardization to lower costs and widen the consumer market. American Fordism of 20<sup>th</sup> century, based on assembly lines, product standardization and higher wages for workers, is the best expression of this stage.

Some reflections arise about Rostow's theory. First, it has a dichotomous approach since it reduces the world into categories: the part that is developed and the part is not. Economic growth stages create an unequal interpretation of *us*, modern and rich and the *other*, poor and underdeveloped. It makes homogenous a group of countries which lacks preconditions for take-off. They do not have entrepreneur culture; their agriculture does not become more productive so that they are not able to accumulate capital and trigger the "development" process. This is the discourse legitimating colonialism, and the yardstick justifying Western paternalism and interference in the Third World. In more recent times it justifies international economic institutions (i.e.

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<sup>14</sup> Ibid.



World Bank, IMF, etc.) intervention in the form of development aids. The other reflection is about the 5-stage process itself. As a matter of fact, in its structure it presumes that every existing society in the world necessarily pass through such stages, and that there is no chance that it could follow another path of development not driven by economic rationality.

Rostow's theory is fruit of a historical phase experiencing a strong faith in science and men's ability to use technology for creating anything they choose to create, to stand over nature using its resources but without awareness of their scarcity. Indeed, such a development model entered a crisis due to the emergence of environmentalism, in addition to the consequences of development politics in the global South and to critiques to the concept of *development* itself.

In response to neoliberal economic politics which promoted such vision of development, new oppositional groups emerged in affected countries threatened by globalization in general and economic globalization. Environmental groups in particular began to direct their protest in anti-economic and anti-capital ways. Globalization of production and consumption models, the increased mobility of capital, the spread of multinationals have undermined the traditional and metaphoric division between global North and global South, leading to a further polarization in between the Third World. Indeed, it is no longer convenient to talk about States from North or South, but of nodes (cities, communities, corporations, even individuals) well integrated into global economy and nodes relegated to the poorest periphery of the same national system. Development projects have been translated in furthering already existing polarization and marginalization of disadvantaged social groups and exploitation of natural resources. The Booker Prize winner, Arundhati Roy asked herself in her *Power Politics*, if globalization is about eradication of world poverty or just a variety of colonialism "remote controlled and digitally operated"<sup>15</sup>.

The 50% of areas covered with vegetation has been destroyed by human activities: in Tropical Asia 62% of natural habitat has been destroyed to convert forests in crops for industrial purpose with high rate in China (99%), Bangladesh (96%), Sri Lanka (86%), Vietnam (76%). In India every year, over a million hectares are ceded for commercial purposes, mining ventures, large-scale dam projects, etc. millions of hectares irrigated

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<sup>15</sup> Roy, Arundhati. *Power Politics*. South and Press. Cambridge, Massachusetts, 2001.

by industrial installations are no longer fertile due to salinization or waterlogging<sup>16</sup>. Lands unavailability and contaminated water resulted in the destruction of ecosystems and people's livelihoods.

One of the more effective criticism and concrete protest actions came from women, especially those of the South of the World, which are attributable to the ecofeminist movement.

## **2. Ecofeminism and Feminist Environmentalism**

When a society is based on relations of supremacy, the abolition of women's oppression and nature's control become the same target to fight for. Such supremacy system legitimates a patriarchal vision of the world and creates discourses from economic, political, and cultural points of view which justify the existing hierarchical order that sees men above the scale having on their side the science, technology and economy laws allowing them to make profits and feel they stand over nature and every living being. The value of such discourses is not about their truth but about their efficacy. As a matter of fact, most of them do not need justification. Following a deconstructionist approach<sup>17</sup>, ecofeminism recognizes the underlying patriarchal discourses that have gained momentum in the last centuries. It shows how the existing system does not reflect the plurality of nature and of human world but interprets it in an arbitrary and univocal manner for its own benefit.

The first and most fundamental criticism that women committed to ecology make is that of scientific knowledge originated from scientific revolution, which has been recognized as universal because objective, thus necessary to discover and understand nature mysteries. Taking science for granted led to the consolidation of nature-culture dichotomy, according to which women are associated with nature while men with culture – a false construct criticized by Carolyn Merchant (1990) and Sherry B. Ortner, since it is legitimized by a patriarchal, constructed ideology. Universality of male superiority on nature has been translated in the universality of women subordination. According to Sherry B. Ortner<sup>18</sup>, it is necessary to going beyond the reductive biological

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<sup>16</sup> Shiva Vandana. *Staying alive: Women, Ecology and Development*. Zed Books, London. January 1, 1989.

<sup>17</sup> Deconstructionism is a 20<sup>th</sup> century school initiated by the French philosopher Jacques Derrida.

<sup>18</sup> Ortner, Sherry B. *Is Female to Male as Nature is to Culture?* (1974) In M.Z. Rosaldo and L. Lamphere (eds), *Woman, Culture, and Society*. Stanford, CA: Stanford University Press. PP. 68-87.

determinism that gives men genetical superior factors which lack in women. In fact, every human being exists within a society that developed norms and customs (both of mental processes and concrete actions) which form part of the culture of such society, and it is in the cultural constructs that women/nature devaluation resides. Culture determines the way men refer to nature; according to men's interests and purposes (suggested by culture), they have the ability to transform the natural environment instead of passively following it. For this reason, Ortner equates culture with human consciousness and with the products of it, that is a patriarchal value system and technology. The first differentiation between culture and nature is established.

To explain why women are associated with nature, two facts are useful: a) women's ability to reproduce, which is associated to the natural processes of reproduction. As De Beauvoir stated, biological women's functions condemned them to simply reproduce life<sup>19</sup>, while men lacking *natural* creativity, express it through *artificial* creations by means of technology and discourses, which are eternal objects in contrast to ephemeral human beings; b) women's position in society is closer to nature: due to their reproductive functions they are confined to a specific social context, the domestic one that is closer to nature, first because children lack yet of cultural structures, second because there exists an opposition between the domestic and the public spheres. The domestic spheres are interconnected creating a society that is a more complex system than domestic unit and is placed at a higher level. Not having *natural* orientation for domestic tasks as women have (i.e. nursing and child care in general), men act at the society level, where culture is determined.

Universality of this kind of thought does not justify the multiple expression of woman/nature subordination, and even less according to different economic, historical, ecological, political, and social situations. The culture/nature dichotomy is a product of culture itself:

"Woman is not in reality any closer to (or further from) nature than man – both have consciousness, both are mortal. [...] various aspects of woman's situation (physical, social, psychological) contribute to her being seen as closer to nature, while the view of her as closer to nature is in turn embodied in institutional forms that reproduce her situation. The implications for social change are similarly circular: a different cultural view can only grow out of a different social actuality;

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<sup>19</sup>De Beauvoir, Simone. *The Second Sex*. Random House, Inc., New York, May 2011.

a different social actuality can only grow out of a different cultural view”<sup>20</sup>.

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To make a brief resume of arguments put forward by ecofeminist theories: women’s domination and nature exploitation are closely interlinked; in a gender hierarchy based on patriarchal systems, women are associated to nature and men to culture; due to connection and closeness between women and nature, the former have an interest in halting the nature exploitation; both feminist and environmental movements aim at the abolition of inequalities and sustainable growth.

### **2.1. Indian Ecofeminist Theories**

Following Independence in 1947, several nonviolent action movements were born in different regions of India in order to preserve traditional lifestyles, natural environment, resources for subsistence. All of them embodied the values of democracy, decentralization of power, and social movement non-violent actions, focusing on the most disadvantaged groups: the poor, women, tribal communities, and peasants. Capitalism development and the “modernization” theory elaborated during 1950s and 1960s, were proposed as the solution to Third World poverty. However, the simplistic dichotomy between traditional societies (rural, underdeveloped) and nontraditional societies (urban, progressive) on the base of which development projects were implemented, resulted in the continuation of the colonial project, this time carried out by internal actors instead of colonial masters. Ecofeminist movements and ecological movements involving women’s participation based their struggle on the recovery of feminine principles of connectedness, wholeness, inter-dependence as opposed to the reductionism of patriarchal science.

The current capitalist production systems, which are accompanied by the centralization and homogenization of complex ecosystems, have imposed on our mainstream culture a vision of the world that we have accepted as the only one possible and necessary to produce well-being. However, it has been largely demonstrated how this economic pattern, and subsequently a cultural one promoting the growth as development, mirrors a well-being that is not impartial, because it acquires meaning just in the context of the

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<sup>20</sup> Ortner, Sherry B. 1974, page 87.

economic growth. Even indicators of well-being, widely accepted in experts' fields, reflect the impartiality of the vision, resulting in inadequate and misleading analysis of different world realities. Proponents of massive development projects in the South<sup>21</sup> of the world, relying on the belief of bringing wealth and prosperity to beneficiaries' countries and communities, did not realize that their vision does not necessarily match that of other cultures, as for example the rural and tribal Indian one, which is examined later in the chapter. Critiques aroused against such "partial" view, and against the assumption of the modern economic thought's universality. Among these, the Indian activist Vandana Shiva, who became spokesperson of Indian ecofeminism. Her environmental activism and disapproval of Western development theories were born from a personal experience in one the leading environmental movements in postcolonial India, the Chipko.

Chipko movement opposed the dismantling of centuries-old traditions in local resource management, in the context of Himalayan mountainous regions. Her work insists in the divide of progress perception:

- the Western one, which measures well-being in terms of profits;
- the South one, with its rural communities and women contribute, which brings with themselves sustainable principles and impacts on human beings and nature.

Biodiversity, decentralization, sharing, diversification are all key words of her struggle to economic globalization that brought new patterns of Western colonization.

"The universal/local dichotomy is misplaced when applied to Western and indigenous traditions of knowledge, because the Western is a local tradition which has been spread world-wide through intellectual colonization. The universal would spread in openness. The globalizing local spreads by violence and misrepresentations. The first level of violence unleashed on local systems of knowledge is not to see them as knowledge"<sup>22</sup>.

That of Vandana Shiva is a complex struggle against not only a predominant model originating from the patriarchal scientific thought of the West, but also a struggle

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<sup>21</sup> It refers to the North-South divide proposed by Willy Brandt according to the socio-economic development of world's countries.

<sup>22</sup> Shiva, Vandana. *Monocultures of the Mind: Perspectives on Biodiversity and Biotechnology*. Palgrave Macmillan, 15 June 1993, page 10.

against those who deny a scientific basis to her theories. Her work aimed at going beyond prejudices that relegate tribal knowledge to mystical and supernatural spheres, and gives new dignity to those who have been able to protect their natural environment with sustainable production practices.

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Vandana Shiva was born in northern India, Dhera Dun, Uttarakhand in 1952. Her father was a forest officer, while her mother was a school teacher and then peasant, both Gandhian followers; they educated Vandana to gender equality and in overcoming the caste system. She lived on her mother's farm so that she soon established a link with nature. After she gained a science bachelor in 1972, she moved to Canada to attend the University of Guelph, where she pursued a Master's degree in philosophy of science. Then, she attended the University of Western Ontario where she got her doctorate with the thesis "Hidden Variables and Non-locality in Quantum Theory"<sup>23</sup>, in 1978. She decided to return home and started working on agricultural and ecological policies for the Indian Institute of Science. In 1982, she established the *Research Foundation for Science, Technology, and Natural Resource Policy*, an independent organization committed to ecological and social sustainable development. From the 1970s, an environmental movement, the Chipko, spread in the Himalayan Valley against destruction of forests from which they drew sustenance and Vandana joined their struggle, realizing how her childhood forest would be cleared. Vandana's criticism of development pattern originated from her personal experience in Chipko movement, thus in 1988, she wrote *Staying Alive: Women, Ecology, and Development*, where she insisted on how development is the translation of corporation interests and national enterprises, which undertook in India a process of modernization implying deforestation and the replanting of species intended for export, in completely disregard for local ecosystems. In 1991, Vandana founded *Navdanya* ("nine seeds" in Hindi), movement aimed at the protection of biodiversity and combating bio piracy. In 1993, she was awarded the Right Livelihood Award, known also as the alternative Nobel Prize, conferred to "honour and support courageous people and organizations offering

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<sup>23</sup>Vandana Shiva. *Indian Scientist and Activist*. Encyclopedia Britannica. 3 November 2015. <https://www.britannica.com/biography/Vandana-Shiva> Accessed 12 January 2017.

visionary and exemplary solutions to the root causes of global problems”<sup>24</sup>.

As already said, Vandana was inspired by Chipko actions for protection of their lands. She showed how environmental destruction and women marginalization are not inevitable processes as Western development patterns might entail. She claimed how the process triggered by economic globalization, capitalism, caused serious levels on inequality, exploitation, and injustices, which put at risk human's life. India has been a recipient of such development policies since it gained independence in 1947, but the beneficiaries have been a small part of Indian society which does not extend to the already disadvantaged segments of population, especially rural women, the poorest of the poor. In *Staying Alive* (1989), Vandana use the categories of (a) development and (b) science, to explain how they have been modelled on exclusively patriarchal vision, but nevertheless, women managed not to be passive agents at the mercy of such phenomenon, but rather and essential guide in the struggle for survival.

The West undertook its development projects in the Third World, starting from the idea of progress. However, two essential concepts lie behind the progress intended by Westerns: 1. Scientific knowledge; 2. Economic development. According to this construction, there is no space for environmental evaluations and, as a consequence, for evaluations of progress' impact on men. The death of nature, of biodiversity, is a violence perpetuated on men and women who draw sustenance from it. Modern science, giving justification of such progress as a product of white Western man, transformed economy through scientific revolution in a productive process aimed at profits and capital accumulation. Man's supremacy over nature has been translated in man supremacy over women, being the latter strongly tied to sustenance economy in countries like India.

Western development is thus based on sexist metaphors, which contributed to the creation of a hierarchy between the productive man in the capitalistic system (at the peak), and women with nature (at the bottom), as inert subjects to exploit. It is paradoxical not considering that women and nature reproduce and create life; in the capitalistic economy, reproduction is not productive. Ecological destruction and women marginalization resulting from such vision led to the emergence of rural women in the form of organized resistance, who opposed the Western concepts of (a) science that does not respect nature needs, and of a (b) development that does not respect men's

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<sup>24</sup> <http://www.rightlivelivelihoodaward.org/> Accessed 12 January 2017.

ones. Ecofeminist struggle in India aim at halting both endless exploitation of natural resources and total disregard for women conditions. The feminist ideology resulting from the struggle goes beyond the gender itself, yet it creates a comprehensive policy which oppose humankind as a whole to the patriarchal universalism.

Women's marginalization worsened during colonial government, during which they lost control over their lands and resources. Without their livelihoods, their invisible productivity has been undermined as well as their position within society.<sup>25</sup> Current development project has merely replaced the same models of subjugation, for this reason Vandana define it a "post-colonial project", based on the Western idea of progress. Development proponents from the West had the presumption to believe that this model was possible even for countries and communities culturally different. In India, the presumption became policy and a new form of colonization, this time perpetuated by internal actors. The best mirror of the economic development, to which experts referred as the indicator of growth is the GDP. However, it does not measure the real growth and well-being experienced by those subsistence economies. GDP is partial in different ways: 1. It does not account for activities outside the markets, as for example women's production of agricultural products to consume within the family; 2. It does not measure cost associated with development, that is nature exploitation, pollution, disrespect for different lifestyles; 3. It does not reveal the distribution of wealth, but it is just an average measure; 4. It does not account for human development<sup>26</sup>. Who thought to human development as unit of measure was the Indian Nobel Prize Amartya Sen, committed to the fight against poverty and inequality. He insisted on the fact that development assessment cannot be separated from the possibility of life and freedom, and GDP is not able to measure them. For this reasons, new and more accountable ecological and social indicators have been introduced<sup>27</sup>. The economist Bina Agarwal criticized limits of GDP especially in India, where there exists a huge informal sector whose activities are not expressed by the GDP, for

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<sup>25</sup> Shiva Vandana. *Staying alive: Women, Ecology and Development*. Zed Books, London. January 1, 1989, page 13.

<sup>26</sup> Reinert, Kenneth A. *An introduction to international economics: new perspectives on the World Economy*. Cambridge University Press, 2011.

<sup>27</sup> Human Development Index, <http://hdr.undp.org/en/content/human-development-index-hdi>  
Ecological footprint, <http://www.footprintnetwork.org/our-work/ecological-footprint/>



instance the unpaid rural work of women. The depletion of forests and water resources is not considered, making less plausible the real value of GDP growth. It is necessary to take into account both objective and subjective indicators<sup>28</sup>: quality of life, civil rights and freedoms, accountable institutions, social networks, and so on, are essential values for addressing real social progress.

GDP merely transforms common goods in products, so that a forest alone is not productive unless it is cleared and converted into timber, which creates profits; water accessible to all is not productive unless it is dammed and stole for industrial purposes, which create profits; women and their work of production and reproduction within the households, are invisible in the eyes of capitalists, because they do not produce profits. As stated by Vandana Shiva:

“Both ecology and economics have emerged from the same roots – *oikos*, the Greek word for household. As long as economics was focused on the household, it recognized and respected its basis in natural resources and the limits of ecological renewal. It was focused on providing for basic human needs within these limits. Economics as based on the household was also women-centered. Today, economics is separated from and opposed to both ecological processes and basic needs. While the destruction of nature has been justified on grounds of creating growth, poverty and dispossession has increased. While being non-sustainable, it is also economically unjust. The dominant model of economic development has in fact become anti-life”<sup>29</sup>.

According to Vandana, the mistake underlying the patriarchal vision of progress is to perceive the environmental destruction as *productive*, while the reproduction of life as *inert* material. Anything providing the rural communities with sustenance, such as water, forest, women’s work, needs to be developed in order to be productive. This way development loses its original meaning in favour of the more appropriate *maldevelopment*<sup>30</sup>: a reductionist vision of man and woman relations as well as of man and nature ones. It creates new forms of inequalities; complementary between male and female activities and between nature and men, at the core of subsistence

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<sup>28</sup> Agarwal, Bina. *GDP has critical limitations*. Outlook, 5 October 2009.

<sup>29</sup> Shiva, Vandana. *How Economic Growth Has Become Anti-Life*. The Guardian. 1 November 2013.

<sup>30</sup> Shiva Vandana, 1989, page 4.

economies, is swept away by a project based not on natural diversity but on inequalities. Rural and tribal communities' way of life in India is perceived as poverty by the West, legitimizing this way development(/maldevelopment) projects that are the real causes of poverty, because they further marginalized women and their status within their household and communities, by taking away necessary resources for survival.

Talking about poverty, Vandana criticizes the position of world's leading economists who tries to end poverty without reflecting on where poverty comes from, as if it were an "*original sin*" happened by chance<sup>31</sup>. The West tries to legitimize its predatory system through destructive development, providing

"a totally false history of poverty. The poor are not those who have been 'left behind'; they are the ones who have been robbed. The riches accumulated by Europe are based on riches taken from Asia, Africa, and Latin America. [...] If we are serious about ending poverty, we have to be serious about ending the systems for wealth creation which create poverty by robbing the poor of their resources, livelihoods and incomes. Before we can make poverty history, we need to get the history of poverty right. It's not about how much more we can give, so much as how much less we can take"<sup>32</sup>.

Maldevelopment is based on reductionist categories of scientific knowledge tending to universality and uniformity, in sharp contrast with the complexity of natural environment. Modern science is believed to be objective, yet through a careful analysis of its origins it is possible to discern how it is a product of Western man from Scientific Revolution. Francis Bacon (1561-1626) had a major role in the construction of modern science; his works contributed to the emergence of dichotomies such as man/woman, mind/matter, objective/subjective, which isolated the male scientific domain from all the rest, and putting it above nature, woman, and non-Westerns. His scientific method was based on the observation of nature as a subject separate from man, and on its subjugation. There is no longer Mother Nature, just a mere utilitarian notion and a matter to be manipulated. Such vision legitimized capitalistic system and caused a gendered polarization with man dominating science knowledge, and the nature/

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<sup>31</sup> Shiva, Vandana. *New Emperors, Old Clothes*. The Ecologist. 1 July 2005  
[http://www.theecologist.org/blogs\\_and\\_comments/commentators/other\\_comments/268520/new\\_emperors\\_old\\_clothes.html](http://www.theecologist.org/blogs_and_comments/commentators/other_comments/268520/new_emperors_old_clothes.html) Accessed 15 January 2017.

<sup>32</sup> Ibid.

woman dependent on it. It is not objective if considering the historical context in which this thought was born, that is those of an emerging industrial capitalism when the Baconian vision was recognized as the project of the middle-class economic development. As stated by Carolyn Merchant, Bacon “developed the power of language as political instrument in reducing female nature to a resource for economic production”<sup>33</sup>. What were simply theories supporting economic progress and technological advancement in the 16<sup>th</sup> century, became an ideology promoted by Francis Bacon. Western science that grew out of Bacon’s thought strengthened the push towards growth and progress that are at the basis of capitalism.

Reductionism has been transformed in scientific method, universally recognized but hiding its ideology of violence and abuse (of nature, woman, and the *other*) behind objectivism, neutrality, and progress. The subjectivity of this system of ideas can be spotted just by who is culturally different and does not take it for granted, that is women and non-Westerns who reveal the patriarchal nature of such system and its dependence on Western culture whose logic is based on nature destruction.

Reductionism of modern science prevents men from identifying nature in a different way, as well as it prevents nature itself from reproducing and renewing by its manipulation as inert matter. Complex ecosystems become the single piece of a productive process, that is just a part in the production chain to maximize. Rural women, on the contrary, through their subsistence economies, produced well-being (satisfying basic needs) in compliance with natural cycles. Thus, women are experts of sustainable practices. However, such alternative knowledge oriented to social well-being and self-support is not officially recognized in the reductionist paradigm, because they are not source of wealth. In the context of economic development, profits are wealth. Vandana Shiva lists the victims of reductionism: 1. Women, because they are perceived as *passive* compared to man, and they are inexpert in scientific knowledge and economic system; 2. Nature, since it is no longer perceived as a complex living organism but inert matter to be exploited; 3. Beneficiaries of scientific knowledge are in reality victims, especially women and the poor, because they are robbed of their livelihoods and of their productive potential; 4. Knowledge itself, since scientific thought impose itself as the only possible knowledge. For a long time, any type of traditional

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<sup>33</sup> Merchant, Carolyn. *The Death of Nature: Women, Ecology, and the Scientific Revolution*. Harper Collins, 10 January 1990, page 68.

and tribal thinking was relegated by experts in the supernatural, mystical, or irrational spheres. However, it has been largely demonstrated how many scientific assumptions are culturally constructed by scientists' community and not by nature rules. Such orientation in current days continues to persist behind neoliberal policies and development projects. When talking about globalization promoters, and proponents of large-scale development projects, Arundhati Roy wrote in her *Power Politics* that:

"[...] a lot of dubious politics lurks inside the stables of "expertise" [...] supposedly "neutral" people, the pillar of democracy – judges, planners, academics. It becomes very clear that it's not really a question of experts versus laypersons or of knowledge versus ignorance. It's the pitting of one value system against another. One kind of political instinct against another"<sup>34</sup>.

Scientific research continues to model itself on the dominant paradigm, that is nothing else than a traditional and local knowledge, which universally spread as an intellectual colonization<sup>35</sup>. Scientific reductionism can't be compatible with natural plurality, and for this reason current rural women's struggles want to show how traditional agricultural practices are not marks of backwardness, but environment friendly and aware of the limits. Political struggle of ecofeminist movements prompts a revision of knowledge criteria taken for granted. Looking at nature from different perspectives, it is possible to claim that (a) reductionist model is based on the criterion of short-term profit maximization, (b) ecofeminist model is based on the value of biodiversity conservation. Violence of reductionism established a link with power and caused inequalities: roots of South domination by North, of women by men, and of nature by Western man date back to the interpretation of the world constructed in the West in the last four hundred years.

## **2.2. The Feminine Principle**

In the Indian cosmology women are inherent part of nature. Nature is the embodiment of feminine principle *Prakriti*, and as such, it is producer of life and nourishment. The close relationship between men and nature is conceptually far from the man who dominates it: it can't exist a separation between man and nature, as well as between

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<sup>34</sup> Roy, Arundhati, 2001, page 27.

<sup>35</sup> Shiva, Vandana, 1993.

man and women, because every form of life derives from the same feminine and natural principle. In the Indian imaginary, man and woman form part of a dialectical harmony which is at the base of ecological thought and action. Nature as embodiment of feminine principle is creativity, activity, productivity, diversity (but not inequality), connection among all living things, and continuity among what is human and what is natural. It is a completely different conception in respect to that seeing nature as resource separated from man. Now it is man substance itself. In the Western imaginary, nature's characteristics are completely misinterpreted: it is inert, passive, uniform and fragmentary, an inferior entity separated from man.

Rural communities have always embodied the feminine principle, they organized their life according to life reproduction. When such societies have been colonized, and industrialization drove men to the cities in need of labour, women remained to deal with resource management for domestic duties and productive (agricultural) tasks. Subsistence productivity has nothing to do with industrial productivity, since the former is a creative force, the latter is violent against nature. Notwithstanding this, in the capitalistic system, women and nature are not productive and for this reason they are relegated to the peripheries of industrialized societies. Devaluation of nature productivity led to the ecological crisis, while devaluation of women's work led to inequalities between men and women. Wealth produced by subsistence economies is invisible in the eyes of a patriarchal market economy, because it is decentralized, local, and in harmony with natural ecosystems. Maldevelopment, on the contrary, is centralized and uniform in its form, and it is visible in its violence against the environment. Subsistence economy, that embodies the feminine principle, respects and feeds on nature ability to reproduce its forests, it feeds on local knowledge and on local resource consumption. The exchange economy destroys natural cycles, it reduces the environment to a phase of the productive process. Western development creates fragmentariness and ignores biodiversity interdependence that is at the basis of natural and human survival.

The symbolism of Mother Earth, creative and protecting, is at the basis of the alternative to Western economic model. Before Vanda Shiva, a major economist and Gandhian collaborator, Joseph Chelladurai Kumarappa (1892-1960), developed an economic thought based on Gandhian principle of *swadeshi* (self-sufficiency of villages), a local economy that would make possible for man to live in harmony with community and preserve the sense of collective responsibility. Such kind of economy

was possible only through respect of the environment and of feminine principle against profits, and respect of collaboration against unbridled competition.<sup>36</sup> Subsistence economy based on the natural life cycles and whose logic is based on feminine principle, gives a chance to a far-sighted economic model, that is an economy of permanence.

Industrialization underappreciated the feminine principle, it devaluated nature power and women's work in the village economy, since it cannot be translated into profits. Kumarappa, as well as Vandana Shiva, opposed the development pattern proposed by the West, which cause the death of nature.

The recovery of feminine principle is the solution to ecological crisis and women's marginalization. Crisis caused by maldevelopment cannot be solved through the same mentality that created them, but through opposite categories and criteria based on life conservation. Women from Third World, with their knowledge, could and represent such ecological and intellectual categories. Ecology and feminism meet to recover the maternal/feminine principle, and to halt maldevelopment advancement imposed by the West. Ecological crisis and social inequalities are consequences of the dominant paradigm which put man above nature and woman. Vandana Shiva criticizes feminism trapped in the gender ideology based exclusively on achieving equality with men, but excluding the recovery of feminine principle in the nature, in the woman, and in the man himself.

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Vandana Shiva activism takes place in this theoretical framework. A new subsistence perspective is proposed, whose logic is those of interdependence, which could solve crisis due to exploitation and destructive principles of Western capitalistic system. Economy purpose must not be the production for market and profits growth, but the creation and reproduction of life, as she stated:

“In nature's economy and the sustenance economy the currency is not money, it is life”<sup>37</sup>.

Science, technology, and world knowledge must be revisited through the lens of a non-

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<sup>36</sup> Corazza, Chiara. *Il principio femminile/materno. La crescita allo sviluppo di J.C. Kumarappa e V. Shiva*. DEP. Deportate, Esuli, Profughe. 2012, n.20, page 91.

<sup>37</sup> Shiva, Vandana. *Earth Democracy: Justice, Sustainability and Peace*. South and Press, Cambridge, 2005, page 33.

patriarchal paradigm, but transversal and synergetic patterns. Subsistence must oppose forms of privatization and commercialization of common resources, to guarantee earth and human survival as well as a greater social justice. Recovery of feminine principle is not only an answer to the domination over women, but also an answer to the domination over the environment and non-Western cultures. It represents the ecological recovery and nature liberation. As Gandhi taught, freedom is indivisible. Recovery of feminine principle is based on inclusion, on the perception of nature as living organism, of woman as activity and productivity. Creative, non-violent, and self-regenerating activity of feminine principle must be inherent part of human being. Environmental struggles carried out by women in the most disadvantaged world peripheries, shall not be interpreted through a gender ideology, because they concern local communities as well as all of humankind.

### **2.3. Feminist Political Ecology**

Some critics, and among these, the prize-winning development economist Bina Agarwal<sup>38</sup>, claimed ecofeminist movements have been excessively based on ideological issues, instead of taking into account power and economic distribution which lay behind women/men and women/women differences. Professor of Development Economics and Environment University of Manchester, Agarwal gained a doctorate in Economics at University of Delhi, and a B.A. and M.A. at the University of Cambridge. Among others, she has been President of the International Society for Ecological Economics, President of the International Association for Feminist Economics, and a member of the Commission for the Measurement of Economic Performance and Social Progress, chaired by Nobel Joseph Stiglitz. She has been honored many awards for her contribution to Development and Economics studies, among these the *Leontief Award* 2009-2010, the *First Ramesh Chandra Agrawal Award* in 2005, and *Malcolm Adiseshiah Award* 2002. Bina Agarwal research has focused on issues such as land rights, environmental protection, sustainable development, collective action, or the political economy of gender.

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<sup>38</sup>Bina Agarwal <http://www.binaagarwal.com/cv.htm>

In the ecofeminist framework, Bina Agarwal insisted on the fact that women/nature relations are “structured by a given gender and class/caste/race organization of production, reproduction and distribution”<sup>39</sup>. Such approach, which has been called by Dianne Rocheleau<sup>40</sup> *Feminist Political Ecology* (1995), is based on material factors and social constructs affecting gender hierarchy and environmental gendered impact.

In her *The Gender and Environmental Debate: Lessons from India*<sup>41</sup>, Bina Agrawal reflects on how Western literature about relations between nature and women is specifically ideologically based. However, in different contexts such as in developing countries, material constraints shaped and continue to shape this type of relations providing the context for an alternative interpretation that she called *feminist environmentalism*. In Western ecofeminist discourse, domination over nature and woman is the result of a system of values that created a hierarchy with men at the peak. This ideological view has been justified by Sherry B. Ortner (1974) by biological reasons, even if she changed her position due to criticism about nature/culture dichotomy, which is not universal but peculiar of each culture; moreover, the concepts of male/female, nature/culture cannot be homogeneously categorized<sup>42</sup>. Carolyn Merchant, as well as Vandana Shiva, spotted the historical roots of patriarchal hierarchy, which dates back to the Scientific Revolution and to early capitalistic economy between the 16<sup>th</sup> and 17<sup>th</sup> century. The organic nature has been transformed in a mechanistic concept to be controlled by men. In such theoretical framework, Bina Agarwal found some issues that need to be revised: a) women are proposed as a homogeneous category, but experiences of oppression are not just gendered but vary according to class, ethnicity, education, etc. b) woman/nature domination is explained just on an ideological basis, ignoring material factors; c) gendered hierarchy has not been contextualized according to cultural, political, economic dynamics from which it results; d) biological argument on woman /nature closeness is essentialist, giving

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<sup>39</sup> Agarwal, Bina. *The Gender and Environment Debate: Lessons from India*. Feminist Studies Vol. 18, No. 1. Spring, 1992.

<sup>40</sup> Dianne Rocheleau is Professor of Geography at the Clark University, Worcester, UK. She has been in the International Council for Research in Agroforestry and in the Ford Foundation. Her works focused on environment and development, political ecology, agriculture and so on, particularly with reference to the role of gender and class in resource and land distribution.

<sup>41</sup> Agarwal, Bina. 1992.

<sup>42</sup> Ibid., page 121.



female nature an immutable and fixed character. It is undeniable that such arguments show the effect of patriarchal ideology on women/nature domination; however, to change it is necessary a more material basis from which ideologies result, that is “the political economy of ideological construction”<sup>43</sup>. In addition to this, also women’s closeness to nature must be analyzed in more concrete terms than biologically ones, as for example class or ethnicity could determine different reactions to environmental exploitation. Vandana Shiva further deepened the analysis, starting from the violence against female nature due to the perception of women and environment, she recognized the historical roots that brought about an industrial and development model established through colonization. As Shiva stated, the *Prakriti* -the feminine principle in traditional Indian cosmology from which everything is created, has been replaced by the perception of human beings as separated from nature. Notwithstanding this ideological framework, Shiva also found the material causes of women/nature dichotomy. Indeed, Third World women depend on nature, which provided them with their livelihoods. Violence against nature is violence against women’s survival. Women depending on nature developed a specific knowledge that has been progressively marginalized in the name of science.

Even in this case, Agarwal spotted some problems to solve in order to render more accurate ecofeminist analysis: a) it is possible to spot an essentialist vision in Shiva’s work about the generalization of Third World women; as a matter of fact, her experience is specifically related to northwest Indian women; b) India is rich in cultures, ethnics, and religious declinations; Shiva’s feminine principle refers only to Hindu narrative and not to all Indian beliefs; c) it is a fact the colonial experience in India imported industrial and development models that had been destructive for the country; however, even before colonialism, India was stratified in classes and castes, which determined different way of access to natural resources. Thus, Agarwal’s *feminism environmentalism* suggests to find men’s and women’s responses to nature in their material reality. What is needed to consider: 1. Gender/class division of labor 2. Property/power distribution 3. Gender/class differences, which determine relations with nature and responses to its degradation. If we want to consider rural and tribal women, they are responsible for subsistence economy of their communities, so that they are

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<sup>43</sup> Agarwal, Bina. *The Gender and Environment Debate: Lessons from India*. Feminist Studies Vol. 18, No. 1. Spring, 1992, page 123

*experts* in the knowledge of nature regeneration processes. As a consequence, Bina Agarwal recognized the potential intrinsic in those dynamics:

1. Women, as victims of environmental degradation, could provide the front of resistance against destructive development models;
2. Women, as experts of a peculiar knowledge of nature, could provide alternative approaches for a sustainable development.

In Indian rural and tribal communities, the produce of forests is essential to their subsistence. Over 30 million people are estimated<sup>44</sup> to be dependent on livelihoods, such as resin, fuel, fodder, medicinal herbs, oils, and so on. Therefore, is of vital importance for the poor that forests are healthy, as well as soil, and water for irrigation and drinking. The problem came when availability of such resources diminished due to different factors: qualitative and quantitative degradation, which reduced availability in general; statization and privatization, which increased inequalities in the distribution. Agarwal called these conditions the primary factors behind the class/gender responses to environmental change<sup>45</sup> and explained them as follows: a) India's environmental degradation: according to official estimates more than a half of India's land have severe environmental problems<sup>46</sup>. Half of the areas that must be irrigated by advanced hydro-projects, has been waterlogged. Soil fertility, availability of drinking water, fish life dramatically declined due to the use of fertilizers and chemical pesticides; b) statization: during colonialism and beyond, state increased its control over forests. British colonial rule was responsible for state monopoly over forest lands, it reduced local people rights to forest resources, it promoted the market-oriented "scientific forest management", aimed at producing commercial species (at the expenses of those needed by local people); c) privatization: the growing privatization of resources could be ascribed to state policies benefiting restricted groups, such as illegal encroachments by farmers, auctioning of lands to privates for commercial purposes, etc.

Additional factors influencing class/gender response to environmental degradation: d) the erosion of community resource management systems: the different forms of land appropriation (statization and privatization) disrupted traditional forms of resource

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<sup>44</sup> Ibid., page 129.

<sup>45</sup> Ibid.

<sup>46</sup> Ibid., page 130.

management. Systems of gathering fuel and fodder, agricultural practices, water management, accompanied by religious and tribal knowledge allowed the sustainable nature management. The shift to state and private control, disrupted those practices and increased environmental degradation; e) population growth: it has been often identified as the primary cause of environmental degradation. However, although it aggravates the situation, the appropriation of village commons, forest produce, and water resources is the main problem. In addition to this, poverty caused by environmental exploitation could lead to a minor education of girls since they have to spend more time in gathering fuel, fodder, water, etc. This leads to higher fertility in the long term, due to the negative correspondence of female education and fertility; f) agricultural technology and erosion of local knowledge: technology promoted by the Green Revolution to increment crop output, contributed to the environmental degradation. Even if the Green Revolution has been successful in the short-term, in the long-one its effects are dangerous. Declined soil fertility, waterlogging, salinization, pollution of drinking water, among others, are the result of agricultural technology. Diversified crops developed by locals in the long period and adapted to the specific area, have been replaced by improved seeds and market-oriented crops weaker. The Green revolution has been based on scientific knowledge based on laboratory research, thus isolating agriculture from the countless connection with surrounding environment. Local knowledge of nature and resources management has been undervalued and marginalized. What Bina Agarwal called “class-gender effects”<sup>47</sup> of environmental change, are primarily referred to the fact that the most affected segment of society is that of poor, due to their dependence on communal resources. The gendered effects depend on the a) gender division of labor, as a matter of fact, women in poor and tribal communities deal with crops and livestock, fetching water, fuel, etc. and they are responsible for family subsistence; b) gendered distribution of subsistence livelihoods and health care within rural households; c) differences of women’s and men’s access to productive resources, lands, and labor market. Due to limitations for property rights, communal resources represent for woman a source of livelihood “unmediated by dependency relationships on adult males”<sup>48</sup>, which is very important in regions where women are highly emarginated and dependent on their

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<sup>47</sup> Ibid., page 136.

<sup>48</sup> Ibid., page 137.

male relatives (i.e. northwest India). Bina Agarwal identified six types of gender-class effects of environmental degradation:

1. Time. Due to the decline of resources and growing limited access to the forests, water, and soil, women spend much more time in their fetching and gathering activities. Less availability of drinking water aggravated the weight of such activities on women.
2. Income. Erosion of resources availability is directly linked to the decline of incomes. Indeed, the longer women have to work seeking for fuel and fodder, the less time they spend for crops, especially in the hills where it is women who deal with cultivation due to men outmigration. This directly affects crop incomes.
3. Nutrition. Decline of crops productivity and availability of resources from forests and rivers directly affect the nutrition of poor families. Shortage of fuel has adverse consequences on diets, since poor people prefer less nutritious raw food, partial cooked food that could be toxic, leftovers that could be harmful, or skip meals in order to economize. Even if such conditions affect the whole family, women and young girls are especially concerned due to unequal distribution of food and healthcare within the family.
4. Health. In addition to malnutrition, poor women in rural areas are also more affected than men by water diseases, due to their domestic tasks. Collecting water, washing clothes, watering livestock, and so on, lead women near rivers, streams, etc. which are polluted by fertilizers and pesticides. Moreover, there are also agricultural tasks affecting women's health, like for example cotton harvest, which exposes them to pesticides associated to a few limb and visual diseases.
5. Social networks. One of the major and not properly recognized consequences of mass displacement due to large-scale development projects, as discussed later, is the disruption of social networks. Women are strongly supported by social relationships that provide economic and social help, especially through hard times, such as labor-sharing, cash or kind aids, borrowing of items, etc. Once those links are disrupted it is not easy to recover them. Especially in regard to Adivasis who live in the forests, their links with the surrounding environment is not only utilitarian but also symbolic, so that their eradication means the eradication of ways of living and of cultures.

6. Women's tribal knowledge. Specific division of labor allowed women to become experts in their working field. They possess knowledge about agricultural practices and plants properties that are extremely useful also in difficult circumstances for survival. Development projects undermining the natural environment where poor rural women work, caused a) the devaluation of indigenous knowledge, b) the erosion of material basis where such knowledge is put into practice.

#### **2.4. Grassroots responses**

Local people immediately affected by environmental degradation did not delay in constituting a strong front of opposition against destructive development policies. A new kind of politics was needed, "not the politics of governance, but the politics of resistance. The politics of opposition. The politics of forcing accountability"<sup>49</sup>.

Local forms of resistance have been shaped according to the specific demands of poor and tribal communities, such as against commercial approach to forestry, which brought the scientific reductionist method (Shiva, 1989) in Indian forests: trees, as source of profits, have been separated from the soil, the water, and the entire ecosystem that had supported them. Short-term profits and their adverse impact on forests productivity replaced long-term natural cycles of regeneration that assured the balancing of each natural element interconnected to the others.

The question is: are poor and rural people, especially women, just victims of these development patterns globally recognized? The answer is no, they are not. Ecological movements raised from local communities demonstrating that they have the potential and the knowledge to reverse such destructive approach to the environment. In the past decades, many grassroots movements emerged in India, such as the Chipko in the Himalayan hills or the Appiko in Karnataka against deforestation, or other against large-scale hydropower projects, such as the Silent Vally Project in Kerala or the Narmada Valley Development Project that affected three Indian states. Different ideologies have backed local opposition groups: Gandhian, Ecological Marxism, Appropriate Technology<sup>50</sup>. All of them recognized that development patterns are no

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<sup>49</sup> Roy, Arundhati, 2001, page 33.

<sup>50</sup> Agarwal, Bina. *The Gender and Environment Debate: Lessons from India*. Feminist Studies Vol. 18, No. 1. Spring, 1992, page 145.

longer sustainable and recognized the potential of local people to be active agents in reversing environmental destruction. However, while the Ecological Marxism criticized class/caste inequalities and promoted modern science for a new social order, the Appropriate Technology identified socioeconomic differentials and supported the merger of scientific and traditional knowledge, the Gandhian approach is relevant for methods of collective action undertaken by the later discussed grassroots movements. Identifying the problem in the industrial/economic development, women participated in large numbers to Gandhian actions of protests. However, as Bina Agarwal indicates “women’s participation in a movement does not in itself represent an explicit incorporation of a gender perspective, in either theory or practice, within that movement”. Agarwal’s *feminist environmentalism*, thus, adds to Gandhian movements a more comprehensive approach that renders more justifiable women’s emergence in those movements and material basis that triggered their participation. The Chipko movement proved the reliability of such approach, not only upholding Gandhian methods of passive resistance but including specific demands according to women’s knowledge of nature and livelihoods protection.

## CHAPTER II

### The Chipko Movement

#### 1. Women and Forests

*"What do the forests bear?*

*Soil, water and pure air.*

*Soil, water and pure air*

*Sustain the earth and all she bears."*<sup>51</sup>

Forests take on a major role in Indian civilization. They are source of life and harmonize all human beings with their surroundings. Forests have been venerated as goddesses, like *Aranyani*<sup>52</sup>, and they have been the foundation of tribal and peasant societies' culture. As symbol of Mother Earth, thus of feminine principle itself, they are source of livelihoods and of ecological knowledge of natural cycles for life reproduction. Such knowledge allowed a sustainable management of the environment; seeds, flowers, leaves, roots, and fruits, which are part of tribal diet, have a host of denominations and require a lot of different managements and preparations<sup>53</sup>, which tribal people know even if they are mostly uneducated (in the formal sense). They acknowledge that every element is connected. Human beings depend on agricultural products and breeding, which in turn depend on forests and pasture lands. The livestock converts forest produce in fertilizer and provide a support for ploughing and transport. Human beings contribute to agricultural work through pruning, irrigation, and breeding.

In rural economies, it is women who deal with agricultural practices and forest produce management. In the Himalayan regions, tribal knowledge of nature has been

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<sup>51</sup> Chipko Song.

<sup>52</sup> Shiva, Vandana, 1989.

<sup>53</sup> Ibid.

handed down from older women to younger ones, but with the arrival of the British and their interest in timber trade, the ancient knowledge has been critically endangered as well as forests and village commons (VCs). Following independence, Indian Government did not make changes in previous forestry policies, continuing to ignore basic needs of local people.

British rule established state property rights over the forest in the 1865 *Indian Forest Act*, restricting local people access to their source of subsistence and starting the exploitation of Indian resources in the interest of British Imperialism. To make way for specific crops, forests have been cleared. Military demand for the construction of imperial fleet, caused in only one year the felling of 10,00 teak trees in Malabar<sup>54</sup>; large-scale fellings occurred also to develop the railway network in India. After 1947, such unlimited exploitation shifted to serve the interests of mercantile and industrial classes. Conforming to the “forest economy”<sup>55</sup>, forests have been valued in terms of capital, so that their management must be aimed at maximizing profits they yielded. This approach left aside other different way to value forests: it ignored the importance of biodiversity, wildlife, the soils and the rivers, the medical herbs, and local livelihoods for those who lived depending on the forests. The short-term market-oriented forests management, destroyed in the long-term forest productivity that is biologically and ecologically based on diversity<sup>56</sup>, and marginalized local knowledge based on sustainability, resulting in social injustice and political inequalities. Forests scientific management has been reductionist in considering entire ecosystems as inert material and timber to be commercialized, and local people have been deprived of their means for survival with all that this implies. In the colonial and newly independent India, natural and forest resources passed from local community management to an increasing State and private one: forest control for commercial exploitation and denial of local people access rights to resources were aimed at maintaining forest revenues and not at conserving the forests themselves. Such reductionist vision caused severe responses. Both men and women suffered from environmental degradation, but the massive

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<sup>54</sup> Ibid., page 74.

<sup>55</sup> Hazra, Arnab Kumar. *History of Conflict over Forests in India: a Market Based Resolution*. Working Paper Series Julian L. Simon Centre for Policy Research. April 2002.

<sup>56</sup> Shiva, Vandana. *The Vandana Shiva Reader*. University Press of Kentucky, 05 January 2015.



contribute of women and the different, gendered responses, depended on their specific responsibilities and kind of dependence on resources exploited<sup>57</sup>. The gendered division of labour, property, and power (that is the feminist environmentalism approach to the issue) allows an explanation of the different responses to the forest management in the Himalayan regions. Being women, especially the tribal ones, responsible for taking care of agricultural practices, gathering and fetching of forest produce, cattle breeding, and so on, they have been the first to suffer the implementation of *scientific* violence against nature. In the regions of Himalaya, women's work of conservation and protection is invisible from an industrial point of view. The expropriation of local people rights, of their resources were followed by protests, especially after the Indian Forest Act of 1878 and 1927. The *satyagraha*<sup>58</sup> spread in the forests and met the iron fist of the British: Gond<sup>59</sup> were killed in the central India for participating in the protests; in 1930 a massive *satyagraha* was held in Tilari village in Tehri Garhwal, dozens of defenseless peasants were killed and hundreds injured<sup>60</sup>. In the mountain regions of Himalaya, women from Garhwal began to organize into groups in order to protect their forests from industrial exploitation. Since early 1970s, the Chipko movement took shape.

When levels of degradation of VCs and deforestation excessively grew, the government pressured by academics, journalist, activists, and so on, implemented a tree-planting program supporting it as "social forestry"<sup>61</sup>. In fact, State monopoly over forests had permitted to continue to use them as source of profits, the process of privatization, which served the interests of few, distorted the resources distribution<sup>62</sup> and disrupted traditional management systems. In addition, other factors such as population growth, expansion of agriculture to forests detriment, small scale hydro-

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<sup>57</sup> Agarwal, Bina. *Environmental Action, Gender Equity and Women's Participation*. Development and Change Vol. 28 (1997). Blackwell Publisher, Oxford, UK. 1997.

<sup>58</sup> Method of non-violent resistance.

<sup>59</sup> Ethnic group of Adivasi people from central India.

<sup>60</sup> Harding, Sandra. *The "Racial" Economy of Science: Toward a Democratic Future*. Indiana University Press, 22 October 1993, page 310.

<sup>61</sup> Agarwal, Bina, 1997.

<sup>62</sup> From 1950 to 1984 VCs diminished from 16% to 63% across Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, and Tamil Nadu. (B. Agarwal, 1997).

electric projects contributed to further degradation of nature. The social forestry program did not success in regenerating VCs nor in satisfying villages' needs, this because local communities were not involved in the policy-making. Species selected to be planted, like the eucalyptus, produced no fodder and almost no fuel, commercial monocultures replaced natural assorted forests, with villagers and women in particular, having no say in the project. The lack of villages participation in the policy-making process and distribution of the benefits resulted in growing local animosity. As a matter of fact, a different successful approach to the regeneration of communal resources was attempted through the participation of local people in different forms. A state initiative was the Joint Forest Management (JFM) reflecting the failure of previous social forestry, it established a partnership between the forest departments and village communities through Forest Protection Committees (FPC), thus sharing benefits and responsibilities. Other initiative for forest conservation have been bottom-up initiated, such as autonomous initiatives of *Mahila Mandal Dals*, women protection groups; people's movement, such as the Chipko, and so on. Such initiatives attempted to restore the preexisting order of forests management when land resources were not privatized and all villagers had usufruct rights regardless their age, sex, class, or caste; however, these initiatives for re-appropriation proposed new and formal access rights, dependent on membership to the new institutions. Such process brought about new issues besides the sole conservation of forests, that is participation and equity (particularly the gender one) in such institutions. As Bina Agarwal wrote:

“Without women’s effective participation in all aspects, the emergent initiatives will have serious adverse consequences for social equity and programme efficiency, and will further disempower women. Indeed the twin concerns of equity and efficient environmental protection need not be in conflict; quite the contrary”<sup>63</sup>.

However, as Agarwal indicated, there have been different kinds of limitations to women participation, like a) formal rules for membership: in most regions JFM accepted one member per household, that was automatically a man; b) traditional norms of membership in public bodies: even in tribal and matrilineal communities women are not allowed to participate in village councils; c) social and cultural constraints: since such initiatives involved mainly hills and tribal communities where women’s role in

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<sup>63</sup> Agarwal, Bina, 1997.

subsistence economy is important, their exclusion is not due to norms of seclusion but to gender ideology; d) logistical constraints: dealing with so many domestic and productive tasks, women have no material time to attend village meetings. Notwithstanding such limitations, strong women's presence in informal organization demonstrated how they managed to go beyond social and cultural barriers. Moreover, it is important to bear in mind the multitude of variables across Indian regions that impinge on the several women's response to the ecological crisis. Cross-states, cross-class, cross-community differences (Hindu/Muslims; tribal/non-tribal; hill dwellers/urban center dwellers; etc.) determine women greater or lesser involvement in environmental protection. In tribal/hill communities, where there are no explicit forms of female seclusion and women have always played a major role in subsistence economy, women had more or less the operating space to undertake collective action. Poor rural families, and particularly the women of these families, have perceived the negative impacts of central management of forests, since they have always depended on VCs and forests produce for their survival. Even if all poor families use VCs, for landless they are significantly important, providing 90% of their fuel and 89% of their grazing needs<sup>64</sup>. The gendered implications of forests misuse and VCs management is due to the unequal distribution of subsistence earning (regarding health care and food) guided by men at the expenses of women and female children, and where both male and female members control resources, women tend to use them for satisfying basic needs, while men for personal ones. Women have limited rights to private property resources (concentrated in men hands) so that VCs and forests represent the most important independent source of livelihoods on which women depend. They are also more important in those regions of India, where women are secluded, and they are entirely dependent on male mediation for accessing to cash economy and markets. It must be said that there was an already existing gender division of labour in tribal and poor rural communities, where women had always dealt with gathering and fetching products from forests and village commons. Such pre-existing order explains the more negative implications of forest mismanagement on women. As already said, the new emerging institutions that wanted to restore the ecological balance of the Himalayan ecosystem, assumed different forms, from the more formalized to the more loosely

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<sup>64</sup> Ibid.

structured. The Chipko took shape from an “agitational collective action”<sup>65</sup> dictated by a specific situation rather than from a cooperative collective action formalized through institution, even if women from Chipko created formal group of control in some areas. The Chipko movement, as a spontaneous people’s movement for the protection of environment, initiated its activity in 1970s against the commercial use of forests, whose 95% was under State and Forest Department control. The movement fame spread in the region and produced other branches of it, such as the Appiko movement in Karnataka.

## 2. The Chipko Movement

Forest resources in India have been a conflictual issue due to the opposing demands of those who needed them for the satisfaction of basic needs (the majority), and those who were interested in their commercial and industrial use. As already said, in the past century, the growing encroachment by State and privates on access rights of people to forests caused an organized grassroots resistance known as *forest satyagraha*<sup>66</sup>. In the Garhwal Himalaya the Gandhian non-cooperation resistance was embodied by the Chipko movement. Meaning “to stick” or “to hug” in Hindi, from the practice to hug trees to prevent their felling, the Chipko movement was born in the 1970s, as a result of a longstanding tradition in the hill areas of Uttar Pradesh, in the region that now is the separate state of Uttarakhand. Its peculiarity was that even if early actions were aimed at fairer politics of resources distribution, it evolved in an ecological movement advocating for a sustainable development. Chipko history was born from the profound wisdom and actions of women deeply aware of the dangers of ecological disasters, and led to the empowerment of environmental awareness and women status within society. The movement spread quickly thanks to the *padyatras*<sup>67</sup> of Chipko leaders and to the decentralized guide of local women.

Before changes made by the British, forests were managed as a common resource according to sustainable exploitation rules collectively recognized. The British

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<sup>65</sup> Ibid.

<sup>66</sup> Vandana Shiva and J. Bandyopadhyay. *The Evolution, Structure, and Impact of the Chipko Movement*. Mountain Research and Development, Vol.6, No.2, 1986.

<sup>67</sup> Long marches on foot to transmit messages from village to village.

introduced a new system of land tenure, known as *zamindari*<sup>68</sup>, in order to maximize revenues for the government: common resources were transformed in private property of the new landlords, the *zamindars*. With the passage of time *zamindars* became from intermediaries between cultivators and British government, full proprietors.<sup>69</sup> *Zamindari* system did not help the ecological conservation of lands: since it was exclusively interested in the collection of revenues and it had unlimited rights to lands exploitation, it represented an obstacle to a sustainable development of rural areas. Common resources shared by local people disappeared.<sup>70</sup> A further destructive impact of British colonialism was the large-scale felling in Indian forests to provide timber for the British Royal Navy and railway lines construction. Undisciplined exploitation of natural resources, curtailment of access rights to local people produced opposition that intensified after the Indian Forest act 1927 and the *forest satyagraha* that met violent responses. Although some achievements were reached by resistance groups, the economic growth continued to be the leading interest of post-independent India, this time carried out in the name of “national interest”. Destructive policies resulted in the instability of Himalayan hills, in the erosion of soil, contamination of water and disastrous events, such as floods and landslides. Chipko movement raised in response to the threat faced by forest dwellers and villages in the hills to their survival. Rural economy of Himalayan hills is dependent on forests, for their providing the material bases to local people sustenance: tree leaves and grass are needed to feed the cattle whose manure is used for fertilizing crops; twigs are source of fuel, while timber is for domestic and agricultural tools; fruits, seeds, medical herbs, resin, etc. are among the many riches offered by natural environment for local consumption. Preservation of the ecological balance has been the main objective of women in the sub-Himalayan region, whose mobilization put forward another conflictual issue about their own status within society.

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<sup>68</sup> Zamindari system was introduced in 1793 by Lord Cornwallis to increase the revenue of the East India Company. in 1793 with a view to increasing the revenue of the East India Company.

<sup>69</sup>System of Land Tenure in Pre-Independent India. <http://www.yourarticlelibrary.com/india-2/system-of-land-tenure-in-pre-independent-india/4821/> Accessed 10 February 2017.

<sup>70</sup> Vandana Shiva and J. Bandyopadhyay, 1986.

## 2.1. Heritage of Forest Satyagraha in Garhwal Himalaya

In 1844, a British businessman, Mr. Wilson, gained the concession to use all the forests of the Garhwal Kingdom<sup>71</sup> for 20 years. His exploitative methods decimated forests of *deodar*<sup>72</sup> and *chir*<sup>73</sup> for the mere annual rental of 400 rupees<sup>74</sup>. When Mr. Wilson's lease ended in 1864, British rulers of northwestern provinces admired Wilson's approach to resource extraction, and inspired by his success they established the Imperial Forest Service, which employed Wilson for further 20 years: in this period the revenues from forests increased from 50 per cent to two thirds of total income of the Kingdom<sup>75</sup>. Discovering such great economic benefits, forest management passed directly in the hands of the Forest Department established by Theri State. New forest policies established by the Forest Act 1865, resulted in restrictions on village use, so that they have been opposed by villagers through acts of resistance against forestry officers. The Forest Act was challenged almost everywhere in British India, and it was amended on the basis of regional or local rules. Between 1865 and 1950, the Forest Act was modified at least five times in the Garhwal Himalaya. Formal protection groups had been instituted, due to the local people struggle against the colonial rule that diminished their access to natural resources: a committee was established in 1921 to assess the losses of local people, the reclassification of forest areas, and the establishment of forest councils. The two resulting forest categories were: I. Those with little commercial value, but source of fuel and fodder for local communities, II. Those with presence of timber for commercial purposes. While the latter went under Forest Department control, for the former Van Panchayats (VPs, forest councils) were formed in 1931<sup>76</sup>. In the 1930s Garhwali people initiated the non-cooperation movement, many

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<sup>71</sup> The Garhwal Kingdom entered the Union of India and became part of the State of Uttar Pradesh on 1 August 1949.

<sup>72</sup> The *deodar* is a type of cedar native to the western Himalayas in eastern Afghanistan, northern Pakistan and India, western Tibet, and Nepal.

<sup>73</sup> *Chir* is a species of pine native to the Himalayas.

<sup>74</sup> Vandana Shiva and J. Bandyopadhyay, 1986.

<sup>75</sup> Rangan, Haripriya. *Of Myths and Movements, Rewriting Chipko into Himalayan History*. Oxford University Press, New Delhi, 2000.

<sup>76</sup> Agarwal, Bina. *Environmental Action, Gender Equity and Women's Participation*. Development and Change Vol. 28 (1997). Blackwell Publisher, Oxford, UK. 1997, page 16.

defenseless *satyagrahis* were killed, yet the Indian Independence movement gave a new impetus to local people's struggles for democracy. By 1947, when India gained Independence, any type of forest category was deeply depleted due to the Second World War demands. Moreover, it must be said that in most cases VPs have been unsuccessful, being under *de facto* control of forest departments and often responsible for infringements of forest protection policies. Being VPs entirely composed of men, a response to their inefficiency was the emergence of the *Mahila Mandal Dals* (women's association) that, even if official bodies such as the VPs did not consider them, concretely acted for the forest protection and for the prevention of violations, for instance, Chipko watchwomen who guarded trees against illegal felling, and so on. Women participation or exclusion in forest protection activities of the new emerged institutions such as JFM, FPCs, or VPs had consequences on their empowerment: women's absence in formal initiatives contributed to reinforce an already existing gender inequality as well as to reduce their bargaining power at domestic and public levels. However, their presence as individuals or as informal bodies, and their successes increased their self-confidence and incited them to assert their rights. Thanks to greater confidence following successes such as that of the Chipko, women began to ask to be members of village councils and to be considered in the decision-making processes, empowering their positions within and beyond the household.

The next step would be local people associations; the Chipko was born in this context. Legacy of political struggle for ecological sustainability and participatory democracy in Garhwal was backed by the crucial support of notable Gandhians, like Mira Behn and Sarala Behn.

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Mira Behn was born as Madeleine Slade in 1892, England, from an aristocratic family. Being her father an admiral of the British Royal Navy, he was often away so that Madeleine spent most of her childhood in the country home of her grandfather, in Surrey. She developed a profound connection with the surrounding nature and a strong passion for music, in particular that of Ludwig van Beethoven; indeed, she became a concert manager<sup>77</sup>. A watershed in her life occurred when she read the Gandhi's

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<sup>77</sup> Mira Behn. <https://www.britannica.com/biography/Mirabehn> Accessed 4 January 2017.

biography, *Mahatma Gandhi: The Man Who Became One with the Universe*, by the French novelist Romain Rolland, in 1924. Rolland admired Gandhi so much that presented him as “another Christ”; in the introduction of Gandhi’s biography French edition, Rolland wrote: “If Christ was the Prince of Peace, Gandhi is no less worthy of this noble title”<sup>78</sup>.

Madeleine, who was traumatized by the events of the first World War, needed a political and spiritual reason to explain Western imperialism, and Gandhi appeared to be the solution to such a search. After a year of preparation, during which Madeleine read all about Gandhi, she got used to live under difficult conditions, she learned Urdu and did heavy manual works. When Gandhi started a fast in October 1924 for Hindu and Muslim unity, Madeleine decided to go to India even if he died. Gandhi survived, and Madeleine with great relief wrote to him asking if she could join his *Sabarmati Ashram* in the western region of Gujarat. Gandhi welcomed her in November 1925, and gave her new “daughter” the name of Mira Behn, after Mirabai, the famed devotee of Lord Krishna<sup>79</sup>. She remained in India for the next 34 years, participating in some of the most important events of India independence movement: she participated in the Salt march to Dandi, in 1930, the direct action and nonviolent campaign against British salt monopoly, and in that occasion, she referred about police abuses; she travelled with Gandhi to London for the Round Table Conference, in 1931. While the Civil Disobedience Movement was taking its course in 1932 and 1933, nationalist leaders were arrested and India press censored, Mira tried to collect much information as possible on British colonial repression and abuses to inform western public opinion. She was detained several times, first with the charge of passing information to America and Europe about the events and conditions in India, then, in 1942, she was arrested and detained in Pune with Gandhi and his wife, Kasturba, who died there two years later.<sup>80</sup> She travelled to the United Kingdom and to the United States to held lecturers

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<sup>78</sup> Romain Rolland's Efforts for Rapprochement between Gandhi and the Indian Communists. <http://www.mkgandhi.org/articles/RomainRolland.htm> Accessed 4 January 2017.

<sup>79</sup> Mallik, Bidisha. *The contribution of Mira Behn and Sarala Behn to social and environmental transformation in the Indian state of Uttarakhand*. Dissertation prepared for the Degree of Doctor of Philosophy, University of North Texas, May 2014.

<sup>80</sup>Mira Behn <https://www.britannica.com/biography/Mirabehn>



about Gandhian principles of nonviolence and search of truth against unfair laws, especially in regard to the discrimination of African Americans<sup>81</sup>.



**Figure 1:** Gandhi and Mira Behn at Darwen, England, September 26, 1931. Author Unknown. Source: <http://www.cottontown.org/Nimoi/sites/CT/resources/jb13088.jpg>

When she returned back to India, Mira Behn was concerned about growing environmental deterioration due to Nehru promotion of large-scale mechanized projects. She started the *Kisan Ashram* in Uttarakhnad, proposing an alternative, small-scale development, based on a sustainable rural economy and on the balance of farming, care of cattle, handicrafts, and cottage industries to grant villages self-sufficiency. As she wrote:

“Living in the midst of this balanced, busy, rural life, I realized as never before the significance of Bapu<sup>82</sup>’s economics. The villagers were in control of the production of the raw materials and the means of manufacture of both the vital necessities of life, food and clothing. They grew their own grain and cotton, the

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<sup>81</sup> Mallik, Bidisha, 2014.

<sup>82</sup> “Father” is for Gandhi.

food grains they pounded by hand, and the cotton they carded, spun and wove by hand. They were therefore masters of their fundamental needs”<sup>83</sup>.

In 1946, the United Provinces<sup>84</sup> launched the “Grow More Food” campaign in order to increment the agricultural production. Within this framework, Mira had the possibility to propose her model of village development based on environmental conservation. She was particularly concerned in respect to landless peasant and proposed a program for their rehabilitation in cultivable lands, abundantly available from military camps. Gandhi was impressed by her initiative and in 1946 she became Honorary Special Adviser to the Uttar Pradesh government<sup>85</sup>. Moreover, in 1947 she started in the Himalayas the *Pashulok Ashram* in Uttarakhand, beginning to work more independently from Gandhi; the Mahatma approved this path as he had affirmed that “if one can produce one ideal village, he will have provided a pattern not only for the whole country but perhaps for the whole world. More than this a seeker may not aspire after”<sup>86</sup>.

The *Pashulok Ashram* was dedicated to cattle rearing. She challenged the increasingly prevailing model of modern development in rural activities, which was replacing the traditional cow economy (closely linked to human activity) with mechanical instruments and chemical fertilizers. This was the starting point for her studying the water and forest ecology<sup>87</sup>. She began to research the causes of the violent floods, deforestation and soil erosion that resulted in severe landslides. She spotted their cause in the misuse of forests by the Forest Department through forest practices that seriously affected the entire ecosystem. The greatest problem was the replacement of the *Banj*<sup>88</sup>, with *Chil*<sup>89</sup>

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<sup>83</sup> Mira Behn, *The Spirit's Pilgrimage*, Page 269, cited in *The contribution of Mira Behn and Sarala Behn to social and environmental transformation in the Indian state of Uttarakhand. Dissertation prepared for the Degree of Doctor of Philosophy, University of North Texas, May 2014*. Bidisha Mallik.

<sup>84</sup> Shortly before the end of the British presence, 1946 elections led to the formation of the Interim Government led by the Indian National Congress in the Provinces.

<sup>85</sup> Mira Behn <http://www.mkgandhi.org/associates/Mirabehn.htm> Accessed 6 January 2017

<sup>86</sup> M.K. Gandhi. *Collected Works of Mahatma Gandhi*. July 16, 1940 -December 27, 1940, Vol.79, Page 65. Available at <http://www.gandhiashramsevagaram.org/gandhi-literature/collected-works-of-mahatma-gandhi-volume-1-to-98.php> Accessed 7 January 2017

<sup>87</sup> Shiva, Vandana, 1989.

<sup>88</sup> Himalayan oak.

<sup>89</sup> Chir pine.

species. While the former was “ecologically fitting”, the latter was used for its mere commercial exploitation. The *Banj* was better for water-retaining, soil stabilization, and for humus production; thus, clearing *Banj* forests could only result in the dangerous exposure of the soil to weather conditions. Monoculture of *Chil* provoked not only the imbalance in the forest ecosystem, but also curtailed rural people access to their livelihoods. Mira Behn wrote a lot of reports to inform authorities about the preoccupying conditions of Himalayan hills, but for the Uttar Pradesh Government and Forest Department there were too many economic interests at stake. When *Pashulok* was ceded to the Government, Mira Behn began to dedicate her attention to original dwellers in the hills, especially in Theri Garhwal area. She soon realized how the economic development did not match with the basic needs of rural people, who had been ignored in favor of commercial exploitation of environment. Since forests, soil, and water represented their material basis for survival, industrialized forest practices made them lost control over their livelihoods, besides further marginalized their position within society. Mira Behn fought for the recovery of natural habitat, she insisted on the democratic participation of rural local people in the decision-making of forestry practices, in order to develop a forest management sustainable at two levels: ecologically and socially.

In the newly independent India, the Forest Department did not change the typical colonial exploitation of forests, rather it incorporated the practices of such “scientific forestry” guided by a capitalist development model. Consequently, conflicts over resources increased. Mira Behn<sup>90</sup> was the first to bring to light the causal link between the misuse of lands and the instability of environmental system, but most importantly, she promoted a participatory forest management, which was essential for indigenous and rural people survival. Even if her insistence on such issues was ignored by an exclusive centralized system, the legacy of her studies about mountain ecology protection influenced other social workers who played an important role in the campaigns of Chipko. Among these, Sunderlal Bahuguna, who had worked with her. Bahuguna joined the struggle for Independence when he was only thirteen years old; in 1954 he got married with Bimla Behn, who worked closely to another Gandhi's

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<sup>90</sup> In 1958 Mira Behn left India to live in a farm in the forests near Vienna. She wrote about her experience in the book *The Spirit's Pilgrimage*, published in 1960. In 1982, Indian Government honoured her with the Padma Vibhushan award; she died a year later at ninety.

“daughter”, Sarala Behn. If Mira provided the theoretical framework for an ecological view of Himalayas<sup>91</sup>, Sarala Behn managed to give a structure and organizational basis to the Chipko movement.

Born as Catherine Mary Heilemann in 1901, London, Sarala Behn joined Gandhi's struggle in India, in 1932. Like Mira Behn, the events of the First World War disturbed Sarala, as well as the enormous industrial growth London was experiencing at that time. Her father had a German surname and was mistakenly arrested being considered on the enemy side; even Catherine was discriminated in the scholastic context for her heritage, and she was denied a scholarship to pursue her studies. Such childhood experience led her to develop an anticolonial awareness later manifested. Her criticism about modern economic patterns and the “unnatural environment of the factory”<sup>92</sup> made her closer to the nature and to a peaceful existence with it. She met different people with her same attitude, and among these Indian students who talked to Sarala about Gandhi's movement of nonviolence in India. Sarala began to take an interest in Gandhi's principles, she was enraptured by his nonviolent and noncooperation movement, but mostly by his constructive program for self-sufficiency; she developed a sentiment of empathy for the oppressed, due to her childhood experience of injustice in the center of the Empire. She decided to go to India in 1931, despite the fact that she wrote to Gandhi to join his work and he replied in the negative, since Westerns had difficulties in adapting to India<sup>93</sup>. She worked for five years at *Vidya Bhavan*, a progressive school at Udaipur, where she had the opportunity to reflect about Gandhi's works on education, interpreted as an instrument to achieve an egalitarian and free society. However, what bothered Sarala in this period was that the school was only for children from wealthy middle-class castes, while poor and women were excluded. She took to heart women's condition since they were oppressed in multiple ways: they did

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<sup>91</sup> Shiva, Vandana, 1989.

<sup>92</sup> Sarala Behn. *A Life in Two Worlds*, Page 8, cited in *The contribution of Mira Behn and Sarala Behn to social and environmental transformation in the Indian state of Uttarakhand*. Dissertation prepared for the Degree of Doctor of Philosophy, University of North Texas, May 2014. Bidisha Mallik.

<sup>93</sup> Klenk, Rebecca M. *Gandhi's Other Daughter: Sarala Devi and Lakshmi Ashram*. Himalaya, the Journal of the Association for Nepal and Himalayan Studies. Volume 34: No 1, 2014.

not have access to education, and they were subjugated by the *Purdah*<sup>94</sup> social practice of seclusion, being isolated in their homes. She denounced such repressive traditions, manifesting an early commitment to women's cause. After leaving the work at Udaipur, she travelled in North India. In 1935, she visited the *Mahila Ashram*, a women's institute at Wardha, where she met Gandhi for the first time. It was not him to give her the name Sarala Behn, as it had happened for Mira Behn, but some of her Indian colleagues began to call her Sarala Behn in her daily life, while Sarala Devi in written exchanges<sup>95</sup>. At Wardha she learned to spin the cotton, as well as other constructive works and their economic/social consequences on village improvement. But she was disappointed by the fact that women and girls did not work with devotion<sup>96</sup> but there was a factitious atmosphere of mere discipline<sup>97</sup>. During this time, Sarala fell ill several times due to malaria, so that Gandhi suggested her to move to a cooler place since she was not able to bear heat and workload there. She accidentally heard of a Gandhian *Ashram* in Chanauda, a town in Almora district, in the Uttarakhand Himalayas. She moved there in 1941, where later started her project of *Lakshmi Ashram*. She travelled many years throughout the hills of Kumaon in Uttarakhand to adapt well to the local environment; she learned Pahari, the local language, she worked with local people, and organized women meetings. It was in this time she acknowledged about women conditions in the hills: due to depletion of forest resources by colonial management and commercial practices, village economies had been compromised and men were forced to migrate to plains cities in search of work; moreover, she became aware of the gendered division of labour, according to which men (when they were present) dealt just with plowing and irrigating, while women performed all other tasks to procure sustenance and care for their households. The major role women played in the village communities was so important that Sarala was dismayed by their "invisible" presence, and absence of initiatives for the promotion of women's dignity and their social progress.

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<sup>94</sup> "Purdah, from Persian "curtain" or "veil" is a religious and social practice from Islamic customs, consisting in the seclusion of women through the cover of their body and their face.

<sup>95</sup> Klenk, Rebecca M., 2014.

<sup>96</sup> Ibid.

<sup>97</sup> Malik, Bidisha, 2014.

In 1942, Sarala participated in the Quit India Movement, for which she was arrested; more than once she violated house arrest order so that she was detained twice, first in Almora and then in Lucknow. Also activists from Chanauda were arrested, many were condemned to death, other had been imposed heavy fines and auction of their properties, which had a demoralizing impact on villages. Sarala travelled from village to village to create a support network for affected families. When she founded *Lakshmi Ashram*, she used contacts established during the prison term to recruit students. From all these experiences Sarala Behn understood that was necessary to create a context to provide education for girls in the hills. Even in the most difficult times, with their men away for work or imprisoned for the Independence cause, women remained to take care for families and farms. In 1946, Sarala Behn founded the *Kasturba Mahila Utthan Mandal* (Kasturba Association for Women's Uplift) after Gandhi's wife Kasturba, popularly known as *Lakshmi Ashram*<sup>98</sup>. It was the first institution dedicated to women's and girls' education, representing an encouraging invitation to social transformation in villages communities. She defined it on the principles of Gandhian Basic Education (*Nayi Talim*), for which girls would learn to become self-reliant (*svavalambi*), community activists (*samaj sevika*), and with self-confidence (*antimvisvas*) they would contribute to the uplift (*uthana*) of village women and to promote the ideal of *swaraj*, the village self-reliance<sup>99</sup>. Sarala work was in opposition to the new pervasive culture promoted by Nehru along with the Western model of economic growth reflected in the education program, whose approach ignored the specific environment, and local culture intrinsically connected to the environment, adapting them to the Western discourses about development, and that was relegated to text books in English, excluding practical work. On the contrary, Sarala promoted the use of Hindi language in her classes, and following *sarvodaya* principles (manual labor and work for the community progress), she included concrete activities, such as *padayatras* and *sivir*<sup>100</sup>. Such activities served to come into contact directly with villagers and learn especially from rural women issues about ecological practices, such as organic farming, craft production, self-reliance, and so on. Sarala opposed a "socially-engineered democracy

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<sup>98</sup> Named after the wife of the Civil Service Officer who donated the home for Sarala Behn's institution.

<sup>99</sup> Klenk, Rebecca, 2014.

<sup>100</sup> Village training camps.

where teachers prepare students for the work force, fracturing society along vocational and intellectual studies, thus creating dominant and elitist class and caste interests”<sup>101</sup>; she re-educated women about gender roles, she focused on reforming their rural perception of femininity through a participatory and non-patriarchal methods of learning, promoting a grassroots democracy. Students from *Lakshmi Ashram* took part to *Bhoodan Movement*, initiated by Vinoba Bhave in 1951 in Bihar, challenging the land reform question. It was a nonviolent movement for the voluntary distribution of lands by rich owners to landless peasants, in order to end the *zamindari* system and to promote the creation of a *Sarvodaya* society. Sarala Behn undertook long *padayatras* to transmit the messages of *Bhoodan* and created a broader network of the *ashram* promoting its educational program. Girls from *ashram* coming directly in contact with the Movement activities gained courage and more self-confidence to put forward solutions about problems of the villages. Their transformation through Sarala education program resulted in an alternative modernity alien to patriarchal interpretation of femininity, and to women stereotypes within society. *Ashram* students went beyond such fixed roles and categorization by gender, class, and caste, becoming leaders in social movements in the region.

In 1960s Sarala Behn decided to make an additional step organizing a social movement whose essence would be constructive reforms in the region. In 1961, the *Uttarakhand Sarvodaya Mandal* was born, comprising women from the hills committed to the welfare of their villages. Major issues on which the movement focused were: alcohol prohibition, local people rights to access to the forests; and local forest industries. For women alcoholism meant violence and waste of resources for them and their children. Their organizational basis was revived by the Chipko movement. In 1965, thousands of women protested first in Ghansaly and then in Theri district against alcohol abuses, which resulted in the ban of distillation, consumption, and sale of alcohol in five districts, Their, Uttarkashi, Chamoli, Garhwal, and Pithoragarh<sup>102</sup>. The nonviolent campaign against alcohol inspired other movements in Uttarakhand, and Sarala Behn had the merit to broaden the conceptual and organizational structure of

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<sup>101</sup> Malik, Bidisha, 2014.

<sup>102</sup> Shiva, Vandana, 1989.

Sarvodaya movement including all the problems affecting villages in the Himalayan hills. Among these, the protection of environment became ever more urgent.

## **2.2. Chipko Movement Actions**

An important factor that increased collective sensibility among women in the hills, was the flow of raw material from the mountain to the industrialized plains, which increased the marginalization of local people, and the social injustice for the centralized management of forestry resources. The institutional practice consisted of Uttar Pradesh Forest Department contracting privates, through a contract auction scheme<sup>103</sup>. Subsistence agriculture dependence on forest resources, made women to perceive the conflict of interests due to the different use and rights on local resources. The social injustice revealed this conflict between a subsistence economy and the commercial management of the forest. The Garhwal region in Uttar Pradesh is composed of four districts, Uttarkashi, Chamoli, Theri, and Pauri. Early manifestation of Chipko actions occurred in Chamoli district at the hands of Sarvodaya workers, followers of Gandhi's disciple Vinobha Bhave. 96% of the population in Chamoli lived in villages, where 97% of female working population was engaged in cultivation activities<sup>104</sup>. Outmigration of men towards plains and urban centers for jobs or armed service was a common practice, thus women were left in villages to deal with crops, livestock, and their household. Therefore, in addition to cases of female-headed households, there were also several male-headed households but without the physical presence of men, although so it was in legal terms and they remained the legal owners of family properties<sup>105</sup>. As already said, gendered division of labour was reflected in the tasks of men and women being the latter subject to patriarchal norms of social organization. For instance, there exists a prejudice about women preparing the land for planting, so that they are dependent on men for ploughing. Despite this, women

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<sup>103</sup> Eco-logie in conflitto: il «Chipko» da protesta contadina a icona ambientalista. By F. Riva. Issue 2014, 2. <http://www.glocalismjournal.net/Issues/FEEDING-THE-PLANET-ENERGY-FOR-LIFE/Articles/Eco-Logie-In-Conflitto-Il-Chipko-Da-Protesta-Contadina-A-Icona-Ambientalista.kl> Accessed 3 January 2017.

<sup>104</sup> Jain, Shobhita. *Women and People's Ecological Movement: a Case Study of Women's Role in the Chipko Movement in Uttar Pradesh*. Economic and Political Weekly, Vol.19, No 41, 1984.

<sup>105</sup> Among Hindus in Garhwal, land property is transmitted in patriline.



independently do all the other works, such as weeding, and harvesting, taking care of cattle, transporting crops, cooking, and so on. For what concerns the distribution of power and authority, there exists a division between political and domestic spheres, being men actively present in the former, with their socio-religious and political activities performed within the community, and both spheres governed by a patriarchal hierarchy. The already explained causes of environmental degradation and its adverse impact, especially on poor and tribal women, prompted a grassroots and mostly female response in the hills. Initiators of the movement had already been present in the region supporting social reconstruction in the previous years. Chandi Prasad Bhatt with his colleagues in Chamoli district had worked for enhancing employment prospects for local people. He was a follower of the nonviolence ideology of Gandhi and Vinobha Bhave and was part of the Sarvodaya workers. In 1964 they established the *Dasholi Gram Swarajya Mandal* (DGSM, Dasholi village self-reliance Cooperative), and in 1971 started a small processing plant in Gopeshwar. However, their work was soon overshadowed by richer contractors from outside. The plant had been closed several times for the lack of raw material, due to Forest Department contracting outsiders. On October 1971, villagers also from neighboring villages protested in Gopeshwar against current forest policy, and once again on November and December 1972. In March 1973 C.P.Bhatt left the Uttar Pradesh Cottage Industries Board to protest against government forest management.

Two are the events indicated as the beginning of Chipko movement actions. One of the first revolts was for the Forest Department refusal of a proposal by the DGSM, which asked to tear down ten ashes, whose timber was appropriate for yokes construction. The Forest Department refused the proposal, but subcontracted the Simonds Company (a manufacturing enterprise from Allahabad, Uttar Pradesh) for the felling of 300 ashes, designed to the manufacturing of cricket bats. In such occasion, the social injustice and conflict interests in forest management, were strongly perceived by hills inhabitants. On April 24, 1973, the protest spread out over a hundred villages: local people joined the DGSM against the Forestry Department politics, they marched beating drums and singing traditional songs<sup>106</sup>, certain that no tree would be felled. In order to not provoke further protests, the Forest Department assigned the

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<sup>106</sup> Jain, Shobhita, 1984.

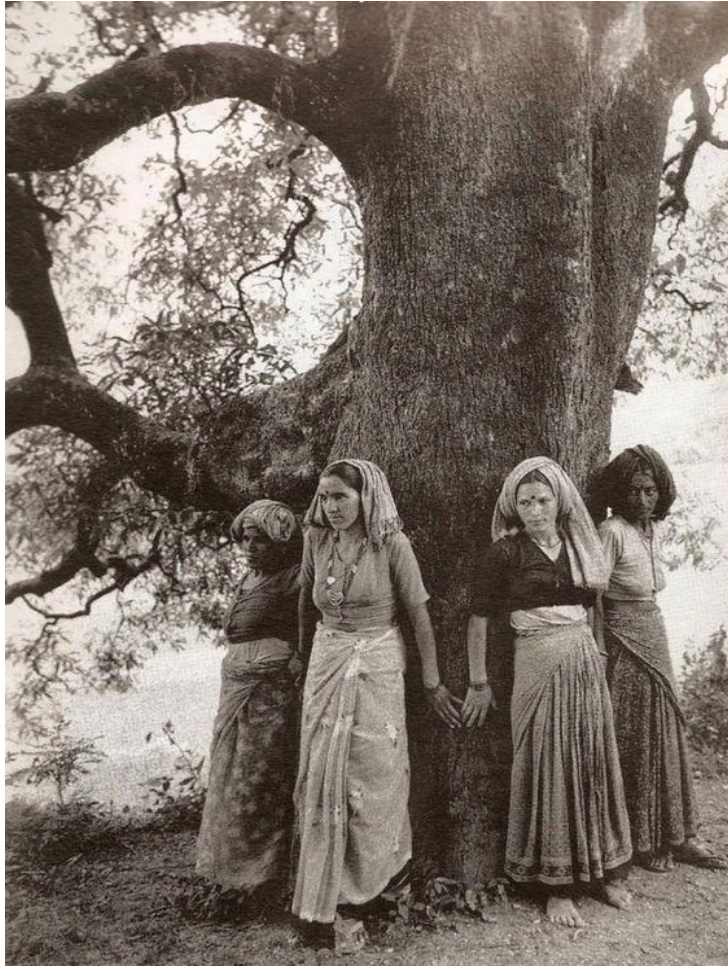
Simonds Company a different geographical area, this time at Phata, in the Mandakini Valley, about 80km away from Gopeshwar. Villagers from Phata were already informed about actions of resistance and forced the Simonds Company to another retreat. The *Uttarakhand Sarvodaya Mandal* (Theri Garhwal) began to spread Chipko messages to all villages in the Himalayas, then, on October 25, 1973, Sunderlal Bahuguna began his *padayatra*, lasted 120 days.

The second event, which represented a watershed in the Chipko movement orientation, was the protest occurred in Reni, where Chipko women used for the first time the tactic of hugging trees. Women of Alaknanda Valley, where Reni was, vividly remembered the devastation of floods in 1970, which submerged several villages and crops, so that they knew the disaster was due to the felling of trees in the area and were convinced to prevent further disasters. In March 1974, the Forest Department had auctioned 2500 trees in Reni forest, regardless the Alaknanda river. Fearing protests that would obstacle tree felling, C.P.Bhatt and other male villagers near Reni were asked to go to Chamoli town to meet a Forest Department official, this way they would be far from the affected area at the moment of felling. Undaunted, thirty women gathered to protect the area marked for felling. When contractors came, the women under the leadership of 52-year old Gaura Devi embraced the trees, forcing contractors to go away. They marched to the felling area in a nonviolent way. As Gaura Devi claimed:

“it was not a question of planned organization of the women for the movement, rather it happened spontaneously. Our men were out of the village so we had to come forward and protect the trees. We have no quarrel with anybody but we wanted to make the people understand that our existence is tied with the forests”<sup>107</sup>.

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<sup>107</sup> Guha 1989:159 cited in Sya Kedzior. *A Political Ecology of the Chipko Movement*, 2006. University of Kentucky Master's Theses, page 13 [http://uknowledge.uky.edu/gradschool\\_theses/289](http://uknowledge.uky.edu/gradschool_theses/289) Accessed 5 January 2017



**Figure 2:** Chipko Women Hug Tree to Protect it from Being Cut in Northern Uttar Pradesh, 1994 Author: Pamela Singh

The Uttar Pradesh government established a committee to enquire the conditions in Reni forest. After two years of investigation, experts claimed it was an area highly-sensitive and felling trees was dangerous for its ecological stability. The government issued a ban of ten years against commercial felling in Reni forest.

Before acquiring a female image, goals of protest were directed by the DGSS together with the women of the hills, the former wanting the re-appropriation of local resources by local people and local industries, while women wanting the protection of a living nature for their daily work. In the initial stage, interests of both groups coincided, but when the exploitation went in the hands of local contractors and forestry cooperatives, women continued to oppose, this time the local men, “It did not matter to them whether

the forest was destroyed by outsiders or their own men”<sup>108</sup>. Chipko movement wanted to prevent any kind of deforestation and to promote the living in harmony with nature. In June 1977, Sarala Behn gathered all activists from the hill region of Uttar Pradesh strengthening the movement against commercial felling. In October 1977 Adwani forests were auctioned in Narendernagar. Sunderlal Bahuguna began a fast, asking contractors and Forest Department authorities to suspend the auction. Notwithstanding this, in December 1977, Adwani forests would be cleared. The division between local cooperatives and women was clear when, Bachni Devi, a woman from Adwani opposed her own husband, inviting women to hug trees that he had contracted. Women used sacred threads tied to trees, to symbolize their protection; groups of watchwomen guarded the forests encouraging their actions with the slogan “What do the forests bear? Soil, water, and pure air”. Contractors withdrew but soon returned on 1 February 1978, this time accompanied by armed police. They wanted to encircle the forests to prevent the interference of local activists. However, before police arrived at the place, the Chipko reached the forests and when contractors came, embracing volunteers already guarded each tree forcing policemen and contractors to another withdrawal. In March 1978 after a new auction in Narendranagar, massive demonstration aroused and twenty-three Chipko activists were arrested, most of them being women<sup>109</sup>. In December 1978, another felling was scheduled in Badiyargarh; Bahuguna began a fast in the affected area and was arrested on the eleventh day of the fast. Thus, thousands of villagers and Chipko volunteers went in Badiyargarh forests to guard trees for eleven days. They managed to drive away the contractors once again. In February 1980, the Oak forest near Dongri Paintoli had been ceded to the Horticulture Department, in return for cemented roads and electricity. DGSM workers with Bhatt expressed their disagreement emphasizing the importance of forest conservation. It was women of Dongri Paintoli who took the matter in their own hands and on February 9, 1980 prevented Oak trees from being felled. Facing the strength of such demonstration, the government, backed by a high power committee<sup>110</sup>, banned the tree-felling in the area. The massive grassroots participation in demonstrations

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<sup>108</sup> Shiva, Vandana, 1989, page 72.

<sup>109</sup> Vandana Shiva and J. Bandyopadhyay, 1986.

<sup>110</sup> Jain, Shobhita, 1984.

against mismanagement of forests led the then Prime Minister Indira Gandhi to impose a ban on commercial felling in the forests of Uttar Pradesh for 15 years.

Characteristic of Chipko methods for resolution of conflicts was the nonviolent resistance. Gandhian *satyagraha* was not just an ideological instrument moved by moral values, yet it emerged from materialist basis and a specific socio-economic context. As Bandyopadhyay and Shiva affirmed, “the dominance of the use of moral force was not, however, an indicator of the non-material objectives of these movements”<sup>111</sup>. Chipko movement used *satyagraha* against the material depletion of their source of subsistence, against the curtailment of their access rights to forests, eventually against a *maldevelopment*<sup>112</sup> that resulted in the impoverishment of rural people and original hills dwellers. For this reason, there exists difference between early *satyagrahas* (such as those of 1930s, in response to the *Forest Act 1927*) and those of Chipko’s: the first were for a fair distribution of resources, to exclude outside competing demands but soon evolved in the awareness about over-exploitation of the forests both by locals and outsiders. Devastations of floods and landslides ever more frequent sent alarming indications about degradation of natural environment in the hills. The Alaknanda tragedy of July 1970, the Tawaghat one in 1977, or at Bagirathi in 1978, prompted local people to roll up their sleeves and protect their forests. Chipko movement demands were not about the appropriation of resources from outside contractors in order to exploit them for local commercial benefits. It wanted the re-appropriation of resources to protect them, and maintain the ecological balance of natural cycles of regeneration. Often, it has been presented as the expression of one side of the dichotomy development/ecology, as if ecology entails a contrary approach to development itself; however, what must be said about it is that Chipko Movement promoted a different dichotomy between an ecological, sustainable development and a destructive development aimed at economic growth. Protagonists of the ecological foundation of Chipko movement, such as Mira Behn and Sarala Behn, demonstrated how development is not automatically in contradiction with environmental stability. Chipko struggle aimed at preserving the material basis for hills people survival through an alternative development model. Such misleading difference between development

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<sup>111</sup> Ibid., page 134.

<sup>112</sup> Shiva, Vandana, 1989.

and ecological stability, affected the Chipko movement itself creating tension at two levels: a) for utilization: since the centralized management of forests worked for commercial demands that ignored local people needs; b) for conservation: since the attention of the central system was on maintaining revenues through misuse of agricultural practices, which destabilized the ecology of the forest<sup>113</sup>.

Women's participation in Chipko demonstrations resulted in an innovative show of power by them. Their success enabled them to acquire self-confidence and revealed "a subtle interplay of power and authority"<sup>114</sup>: because women are the sole managers of agricultural activities, livestock caring, and all the other tasks already mentioned, men are in one way or another dependent on them for their subsistence. Women have been "source of dissent, alternative ideology and agent of change"<sup>115</sup>. They began to ask equal rights with men in decision-making about issues of their villages, arguing that as they were responsible for cattle and agriculture they must participate in decision about forestry management. Destruction of forests disrupted their daily work, forcing them to walk for much longer distances and work for much more time to meet their basic needs. The increased workload had had heavy mental and physical consequences on women and the lack of time affected their time for children care. Becoming aware of their fundamental role and that of the natural environment, women felt to have the right and duty to participate in decision-making process. In Gopeshwar, women created a Mahila Mandal to protect the surrounding forest, they organized groups of watchwomen to guard trees and imposed fines on violations. DGSM organized educational camps, increasingly attended by women, to discuss alternative forms of sustainable development. In 1983, Chipko movement spread nationally as *Appiko* movement and in 1987, Indian government enforced a second 15-year ban on the commercial felling in Uttar Pradesh. From 1988 Chipko forest protests have been intermittent; some branches have been involved in struggles against dams, mines, and so on. Anyway, Chipko's message continues to inspire activists around India and internationally.

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<sup>113</sup> Vandana Shiva and J. Bandyopadhyay, 1986.

<sup>114</sup> Ibid.

<sup>115</sup> Ibid.

Chipko movement challenged Western model of development, and the colonial approach and scientific knowledge reflected by such model. In India, men from well-off and educated classes accepted development projects as the ideal path toward progress. Self-sufficient villages in this context have been perceived as poor and backward. Women found themselves threatened by a destructive development, since the ecosystem supporting their everyday life was seriously damaged. Thus, women had a stake into maintaining the state of affairs. On the contrary, for poor men modernization meant more paid jobs in construction work, shop, hotels, and so on, which meant reducing their dependence on women by earning money. However, social, and ecological cost of implementation of large-scale development projects soon became clear, and when material basis guaranteeing the survival of the poor, tribal, rural people in the Himalayan hills have been threatened, they showed their potential till then unexpressed and had the chance to promote alternative ways of development in harmony with nature. Mahatma Gandhi contributed to social and environmental justice, his approaches of nonviolent action, cooperation and self-help based on the poor, as well as contributions of his follower, such Vinobha Bhave, Mira Behn and Sarala Behn inspired social workers in the Garhwal region and prepared the background for inclusive participation in later social movements. They insisted on decentralized strategies, need-oriented projects, environmental stability, and participatory democracy. Chipko actions and consequent events brought to a reformulation of traditional gender relations. Many women took the leadership of the movement, as Shiva cited some of them, “Mira Behn, Sarala Behn, Bimla Behn, Hima Devi, Gaura Devi, Gunga Devi, Bachni Devi, Itwari Devi, Chamun Devi”<sup>116</sup> without forgetting contribution of men, such as “Sunderlal Bahuguna, Chandi Prasad Bhatt, Ghanshyam Shailani, and Dhoom Singh Negi”<sup>117</sup>. Yet, women emerged as active agents of social change, reversing their conditions as victims of modern prevailing patterns of economic development. The importance of the Chipko movement is explicable from different perspectives: it was successful in challenging state forest departments and in obtaining the 15-years ban on commercial felling of trees in the sub-Himalayan region; it broadened its ultimate objective, from the initial stage oriented

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<sup>116</sup> Shiva, Vandana, 1989.

<sup>117</sup> Ibid.

toward the re-appropriation of villagers' rights over resources it evolved in an environmental movement, which promoted awareness about ecological crisis in the Himalayan hills. It was a cross-social inclusive movement and because of the active participation of women with their fundamental justifications it has been denoted as an ecofeminist movement. For its contribution, the Chipko movement has been awarded the Right Livelihood Award, in 1987<sup>118</sup>.

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<sup>118</sup> Kalita, Barnali. *Chipko Movement: a Landmark Effort in Addressing Environmental Crisis in India*. International Journal of Interdisciplinary Research and Innovations, Vol.3, Issue 3, pp: (17-21), September 2015.



## CHAPTER III

### The Narmada Valley Development Project

#### 1. The Narmada River

*“O, virgin Narmada  
How great is your renown.  
Your palace is of stone  
Its door made of earth.  
The spire is of gold.  
There is a great festival for you,  
O, virgin Narmada.”*

(Popular Gond song for the celebration of Siva’s birthday)

Indian subcontinent is rich in cultures, languages, religions, artistic expressions, and interpretation of sacred texts, in such a way that it is impossible to generalize about regions and individuals. Especially the rural section of Indian people is full of myths, rituals, and symbols whose understanding is fundamental to conceive tribal people’s attachment to local culture, natural surroundings, and traditions. India is a country of contradictions: if on the one hand there exists a strong bond with tradition, on the other modernization gathered pace. As the Indian novelist Arundhati Roy wrote,

“We grow like the maturing head of a hammerhead shark with eyes looking in diametrically opposite directions” <sup>119</sup>.

The Narmada River (in Sanskrit “the giver of delight”) is an essential part of such combination of traditional and modern, representing a sacred symbol to Hindus, and a source of profits to politicians and capitalists. Water and rivers have been always crucial for Indian civilization, since they allow its physical and cultural subsistence. As Vanda Shiva described it, India is a riparian civilization whose mythology and ecological knowledge is inextricably linked to river courses.

References to Narmada first appeared in the epic poem *Raghuvamsa*, by Kalidasa<sup>120</sup>, who referred to the River as “Reva”, swift flowing and meandering river<sup>121</sup>. It is the fifth

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<sup>119</sup> Roy, Arundhati. *Power Politics*. South and Press, Cambridge, Massachusetts, 2001, page 1.

<sup>120</sup> *Raghuvamsa* is a Sanskrit epic poem by the well-known Sanskrit poet Kalidasa. The date of composition is unknown, nevertheless the poet is presumed to have flourished in the 5th Century.

<sup>121</sup> Fisher, William F. *Toward Sustainable Development: struggling over India’s Narmada River*. M.E: Sharpe, NEW York 1995.

largest Indian river. It crosses central India flowing from eastern Amarkantak hill range to West for 1.312 km before reaching the Arabian Sea through the Gulf of Cambay at Baruch, 200 miles north of Mumbai. The river has a basin area of 97.410 square kilometers.

The Narmada Valley has been home to several civilizations, evidence of which are the many animal and human bone relics, stone tools, and prehistoric rock drawings discovered in it. The most ancient human remains found so far in the Valley could date back to 150.000 years<sup>122</sup>; the rock paintings reveal an evolving cultural expression ranging from animals representation, such as tigers, elephants, or rhinoceroses, which date back to 12.000 years, to representation of Mesolithic hunter-gatherer lifestyle in Narmada communities<sup>123</sup>. Now many communities cohabit in the Valley: Hindu sects such as the *shivaites* or the *vishnouites*, Sufi, Jains<sup>124</sup>, Adivasis. Over the past millennia, the Narmada Valley has been shaped in a varied and plural ensemble reflected in the many representations given to Narmada by each of them. To Hindu, the Narmada is a Goddess related to Shiva; as a matter of facts, Hindus living in the Valley honour rituals and festivals, they sing prayers, and take purifying baths in the Narmada. Yet, many Muslims' holy places are along the river banks. Sufi hermits live in its caves, forests, and under its waterfalls, while Muslim communities developed around them. The city of Maheshwar, which was the headquarter of the historic Hindu Queen Ahilya Bay, is inhabited by 50% Muslims<sup>125</sup>. On the other part, Adivasis tribes living in villages on the hills of Narmada, refer to the river as Mata<sup>126</sup> Narmada. The two most numerous Adivasi groups are the Bhil and the Gond in their turn formed by many subgroups, and among those tribes that are officially recognized in central India<sup>127</sup>. Their connection with the surrounding environment is expressed in several ways: in food habits for example, in which dominate rice, lentils, millet, or wheat; in the

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<sup>122</sup> Ibid. page 53.

<sup>123</sup> Ibid. page 54.

<sup>124</sup> Followers of Sufism, a branch of Islam and Jainism, an ancient Indian religion.

<sup>125</sup> Cremin, Emilie. *Omkareshvara, a holy city of Narmada in the course of transformation*. University Paris 8 Vincennes Saint-Denis. October, 2005.

<sup>126</sup> Mother.

<sup>127</sup> Fisher, William F. 1995, page 55.

cultivation of these cereals, which relies on monsoon rains rather than on advanced methods of irrigation. Moreover, such a nature-human connection is also reflected in the botanical and zoological names that *Adivasis* subgroups living in the forests use for themselves.

“The Jamania, who are named after the jamun tree (*eugenia jambolana*), will not cut or burn any part of this tree. The Rohini worship the rohan tree (*soymida febrifuga*); and the Aвалиа, the anola tree (*phyllanthus emblica*). The Mori worship the peacock (*mor*, in Hindi), and the Masrya will not kill or eat fish (*matsya*, in Hindi and Sanskrit)”<sup>128</sup>.

Narmada is one of the most sacred rivers in India along with other six holy rivers: the Ganga, the Yamuna, the Sarasvati, the Kshipra, the Godavari, and the Kaveri Rivers. All the sacred rivers in India have female names because they are considered home to goddesses. For the same reason, every day at dawn and at sunset Indians address to rivers with the name “mother”, or “Holy Virgin”. Ancient texts such as the “Puranas”<sup>129</sup>, praise its exceptional purifying properties. According to legend, in order to obtain the purification, the devotee must bathe in the Ganges River, or pray for seven days along the banks of Yamuna or three days near the Saraswati. However, the mere sight of Narmada is enough to free people from any stain. According to another legend, when the Mother Ganga is very dirty due to debris She brings in monsoon seasons, She wears a black saris and cleans herself in the waters of her Sister Narmada<sup>130</sup>. The Narmada is one of the most venerated place by women who, every year, carry out rites and ceremonies along the river banks in her honour. Among these, the *Narmada Jayanti* is one of the celebration most observed celebrating the birthday of the river and looking for blessings from it as a mother. All women who have the opportunity, at least once in life, undertake the *Parikrama*, a pilgrimage lasting three years, three months, and thirteen days. The ancient Hindu believed that walking around sources of positive energy would charge pilgrims with the same positive energy. Thus, they walk on feet from the Arabian Sea at Bharuch, in Gujarat, to the source of the river in the

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<sup>128</sup> Ibid. page 56.

<sup>129</sup> Literary texts, all written in Sanskrit verse, whose composition dates from the 4th century B.C. to about 1.000 A.D. The word “Purana” means “old”.

<sup>130</sup>What is the story Of River Narmada from Puranas and significance of Narmada Parikrama? <http://hinduism.stackexchange.com/questions/14530/what-is-the-story-of-river-narmada-from-puranas-and-significance-of-narmada-pari> Accessed 10 November 2016.

Amarkantak hills, in Madhya Pradesh, or vice versa, and go back along the other side for about 2.600 kilometers. During the pilgrimage, devotees pass through a mystic and intellectual itinerary meeting several holy temples and sacred basins; among these, there is the Shoolpaneshwar Temple where devotees are symbolically deprived of all their belongings and left with the essentials: philanthropist along the way will donate them what pilgrims need to go forward. Due to the construction of the Sardar Sarovar Dam on the Narmada River, the Temple has been submerged, and pilgrims forced to continue in a roundabout way<sup>131</sup>.

The Narmada river has been at the core of religious life, social and cultural developments, for thousands of years. Due to the race to modernization such complex of Narmada natural environments and tribal expressions of its inhabitants have been cast aside. The Adivasis constitute the 40% of 23 million people that were displaced by development projects in India, while for what concerns Dams Projects in general, they have displaced about 8.5 million to 21 million people<sup>132</sup>.

“Constructors of development paradigms [...] risk losing the value of cultural and religious landscapes in our past, present, and future. Unlike those who call the Narmada “Ma”, there are too many “constructors” who are losing touch with the balance between the natural ecology of homestead, cultural attachment to a local environment, and the sustainability of human development and livelihood”.<sup>133</sup>

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<sup>131</sup> *Parikrama - Narmada Parikrama*.

[http://www.liquisearch.com/parikrama/narmada\\_parikrama](http://www.liquisearch.com/parikrama/narmada_parikrama) Accessed 11 November 2016

<sup>132</sup> Fernandes 1991; Paranjpye 1988, cited in Fernandes 1993: 37; Parasuraman 1999: 50; cited in *Resettlement in the Narmada Valley: Participation, Gender, and Sustainable Livelihoods*. Jain, Anupma. Thesis for Doctor of Philosophy. London School of Economics and Political Science, 2005, page 17.

<sup>133</sup> Deegan, Chris. *The Narmada in Myth and History*, in “*Toward Sustainable Development: struggling over India’s Narmada River*”. Fisher, William F. M.E: Sharpe, New York 1995, page 67.



**Figure 3:** Representation of *Mata Narmada* in tribal culture.  
Source: <https://wiralfeed.wordpress.com/tag/narmada/>

## 2. The Narmada Valley Development Project: Environmental and Social Damage

Post independent India undertook the modern development process backed by the central government. Large-scale and capital-intensive projects have characterized such process, with the aid of international institutions helping infrastructure construction, especially for increasing agricultural productivity. Development became synonym of economic growth and industrialization. This kind of development, while enriching narrow elites, it has destroyed natural environments and impoverished rural people, so that it has been better defined as *maldevelopment*<sup>134</sup>. Projects for dams'

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<sup>134</sup> Shiva, Vandana, 1994.

building along the Narmada river date back before India's independence. British authorities knew the importance of irrigation control especially after the two great droughts that afflicted the Indian subcontinent in 1887 and 1889. However, no irrigation plans were conducted until the end of the Second World War, since Narmada basin was divided in many princely states that had no ability in undertaking major river development projects and colonial authority did not see benefits in investing in that black alluvial soil<sup>135</sup>.

In 1946, the India's Central Waterways, Irrigation, and Navigation Commission set up the first scheme for developing the Narmada River Valley backed by investigations on the topography and hydrology of the valley revealing an environment conducive to build large dams<sup>136</sup>; however, works did not start until the beginning of 1960s. The project was conceived for providing drought-prone Western India, mostly inhabited by peasants, with drinking water, efficient systems of irrigation, and with hydropower (energy was supplied until then by thermal power plants based on coal).

The then Prime Minister Nehru, full of proud for its commitment to India's modernization, promoted multi-purpose projects, speaking about dams as the *temples of modern India*. Eager to make an industrialized and modern India, human and ecological costs due to development projects and economic growth of the country were considered only later. Between 1947 and 1980, the 15% of India's total investments was for the construction of over 1000 big dams and their infrastructures<sup>137</sup>. It was not long before Nehru changed his mind and became conscious of how developing countries were undertaking huge development projects as a spreading "disease of gigantism"<sup>138</sup>. Only in India, there exist about 4.000 dam projects. International financial institution, developing countries governments, and private investors contributed to this race to development; the World Bank first loan to a developing

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<sup>135</sup> Alluvial soils are immature and have weak profiles due to their recent origin, they are porous because containing clay and they are suitable for agriculture. Black soils contain a large clay factor, 62% or more. Generally, black soils of uplands are of low fertility while those in the valleys are very fertile.

<sup>136</sup> Sanjeev, Khagram. *Dams and Development: Transnational Struggles for Water and Power*. Cornell University Press, 2004, page 67.

<sup>137</sup> Ganguly-Thukral 1992: 9; McCully 1996: 18, cited in *Resettlement in the Narmada Valley: Participation, Gender, and Sustainable Livelihoods*. Jain, Anupma. Thesis for Doctor of Philosophy. London School of Economics and Political Science, 2005, page 12.

<sup>138</sup> Roy, Arundhati. *The Cost of Living*. London: Flamingo, imprint HarperCollins, 1999, page 104.

country was for an irrigation and hydropower project (Chile, March 1948)<sup>139</sup>; since it was born, it has lent about US\$58 billion for more than 600 dams in 93 countries<sup>140</sup>. Profits from such projects were particularly attractive, but nevertheless, they became increasingly infamous due to opposition of organized group for social and environmental justice<sup>141</sup>.

Between 1946 and 1960, several projects were proposed but not implemented since a dispute among concerned States rose about profits and loss of the project: water benefits were mostly directed to drought-prone areas of Gujarat and Rajasthan, while expected submergence territories were mainly in Maharashtra and Madhya Pradesh. When in May 1960, Maharashtra and Gujarat became two separate states (they formed part of a single State), Maharashtra refused to support the construction of the largest storage dam project in Gujarat (the Sardar Sarovar Project), since it would not benefit of irrigation and drinking water supply. In the mid-1960s India faced a devastating drought; monsoon rains were not sufficient, crops failed and the then about 36 million people suffered famine. In 1969, with a delay in initiating works of more than two decades and no reached agreement, the central government prompted by the drought set up the Narmada Water Dispute Tribunal headed by a Supreme Court judge, under the Interstate Water Disputes Act of 1956. The final plan was approved in 1979, when the Tribunal gave its judgement. The award included:

- Gujarat and Madhya Pradesh would receive respectively 9 MAF<sup>142</sup> and 18.25 MAF in a year;
- The largest project of Sardar Sarovar Dam was defined: its storage reservoir would reach a level of 455 feet (4.72 MAF);
- Power benefits from the Sardar Sarovar Project that were expected to be of 1.450 megawatts (MW) would be shared between Gujarat, Maharashtra, and Madhya Pradesh in the proportion of respectively 16%, 27%, and 57%;

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<sup>139</sup> Goldsmith, Edward. Nicholas Hildyard. *The overt reason for building dams*. The Social and Environmental Effects of Large Dams: Volume 1. January 1, 1984.

<sup>140</sup> McCully 1996 [19] cited in *Resettlement in the Narmada Valley: Participation, Gender, and Sustainable Livelihoods*. Jain, Anupma. Thesis for Doctor of Philosophy. London School of Economics and Political Science, 2005, page 15.

<sup>141</sup> Ibid. page 15.

<sup>142</sup> MAF, Million Acre-Feet is the volume of water that cover 1 million acres to a depth of 1 foot.

- Gujarat would have a canal with a reservoir of 300 feet for irrigating 1.8 million hectares inside its borders, and 90.000 hectares in Rajasthan;
- The Tribunal established a resettlement and rehabilitation (R&R) policy for the affected families including States-concerned obligations in their regard. Then, it established the Narmada Control Authority to guarantee the application of Tribunal's ruling and the Sardar Sarovar Construction Advisory Committee to supervise the Sardar Sarovar Dam construction<sup>143</sup>.

The ruling of the Tribunal established costs and benefits to be shared by the three states: 245 villages were likely to be submerged and among these, 193 in MP, 33 in Maharashtra, and *just* 19 in Gujarat<sup>144</sup>. Thus, MP and Maharashtra would be payed costs of resettlement by Gujarat. Indeed, the project was supposed to alter the Narmada river's flow from MP and Maharashtra toward Gujarat in order to provide it with better irrigation<sup>145</sup>; thus, Gujarat would pay for being the major beneficiary.

The project consisted of 30 large dams, 135 medium dams, 3000 small dams, and more than thirty thousand harvesting protection systems which would irrigate about 5 million hectares and they would provide 2700 MW of hydro-power in addition to water for domestic and industrial purposes<sup>146</sup>. Among them, the mega dams would have been the Sardar Sarovar Dam with its 138 meters and 1.450 megawatt (MW) of energy power, the Maheshwar Dam (400 MW), and the Indira Sagar Dam<sup>147</sup>.

The plan itself, in its intentions, was not harmful; however, the other side of the coin showed a worrying aspect about involving mass displacement from a social point of view, environmental damage from an ecological one, and enormous financial costs. Per estimates, about 250,000 people would be immediately displaced and more than

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<sup>143</sup> Patel, C.C. *The Sardar Sarovar Project: a victim of time*, in *Toward Sustainable Development: struggling over India's Narmada River*. Fisher, William F. M.E: Sharpe, NEW York 1995, page 77.

<sup>144</sup> Ibid. citing *The Narmada Water Resource Project, India: Implementing Sustainable Development*, by Ahmad Afroz, *Ambio* 28, August 1999, page 400.

<sup>145</sup> Ibid.

<sup>146</sup> Dwivedi, Ranjit. *People's movement in environmental politics: a critical analysis of the Narmada Bachao Andolan in India*. Institute of Social Studies. The Hague, March 1997.

<sup>147</sup> Dams construction on the Narmada River, India. <https://ejatlas.org/conflict/dams-on-the-narmada-river-india> Accessed 12 November 2016.



a million would find their livelihood destroyed<sup>148</sup>. 245 villages were supposed to be submerged by dams' basin formation, about 140,000 families, mostly composed of peasants, fishers, and indigenous peoples (the *Adivasis*) would see their livelihoods swept away by irrigation and canals system, and thousands of people living below the dam would be certainly affected<sup>149</sup>. The villages that were supposed to be submerged in Maharashtra and Gujarat have mostly Adivasi inhabitants, while in Madhya Pradesh 140 villages were supposed to be affected in the fertile Nimad plains inhabited by rich cash-crop farmers<sup>150</sup>. It must be said that among these PAPs (Project Affected People) there were other thousands affected by "secondary displacement"<sup>151</sup> who were not considered as such, that is: the receiving regions where displaced people were resettled, those who lived near the project area, and who made a living out of the river. The Sardar Sarovar alone would inundate 150,000 villagers with its 200 km-long reservoir, while 24,000 farming family would lose more than a quarter of their lands due to the 75,000 km of irrigation systems. In addition to this, dam constructors planned a natural space to counterbalance the habitat loss of submergence areas causing a further forced displacement of 30,000 to 40,000 people<sup>152</sup>. What is worse, Project experts as well as government policymakers did not consider the gendered impact of displacement. Perceiving the household as an homogeneous segment of society, they ignored the complicated nature of gender roles and power relations within such segments<sup>153</sup>. Being the surrounding nature at the core of these complexities, alteration of it implies in turn the alteration of gender relations, aggravating inequalities already existing. Women in poor communities represent the weakest group, dealing with domestic duties, such as the care of children or older family members, in addition to productive duties which are not formally recognized – land preparation, harvesting,

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<sup>148</sup> Jan Michiel Baud, Rosanne Adriënne Rutten. *Popular Intellectuals and Social Movements: Framing Protest in Asia, Africa, and Latin America*. Cambridge University Press, Cambridge, UK, 2004, page 136.

<sup>149</sup> Thomas R. Berger. *The World Bank's Independent Review of India's Sardar Sarovar Projects*. American University International Law Review, Volume 9 | Issue 1 Article 3, 1993.

<sup>150</sup> Dwivedi, Ranjit. 1997, page 6.

<sup>151</sup> Mc Cully, Patrick. *Cracks in the Dam: The World Bank in India*. Multinational Monitor, December 1992. [http://www.multinationalmonitor.org/hyper/issues/1992/12/mm1292\\_08.html](http://www.multinationalmonitor.org/hyper/issues/1992/12/mm1292_08.html) Accessed 6 November 2016.

<sup>152</sup> Ibid.

<sup>153</sup> Lahiri-Dutt, Kuntala. *Large Dams and Changes in an Agrarian Society*. 2012 [www.water-alternatives.org](http://www.water-alternatives.org) Accessed 12 November 2016.

irrigation, weeding, etc. Large Dams Development Projects were supposed to reduce disadvantageous position, but it has been demonstrated how its benefits have not been equally shared. Altering natural cycles work, women's control over resources has been reduced damaging their autonomy in their everyday life. As Lyla Mehta and Bina Srinivasan stated in their Paper on Gender and Large Dams:

“[...] large dams have far-reaching consequences on the economic, social and cultural contexts within which men and women live their lives. Largely, the spread of pains and gains has not been equal. To some extent, this is because of because of gender biases, ignorance and reductionist modes of operating in dam-building activities”<sup>154</sup>.

The Government availed itself of the Indian Forest Act (1878) and the Land Acquisition Act (1894), which allow it to own all the properties, also forest lands, within state boundaries. Thus, it has the right to obtain private property for public scope, overstepping other protective provisions. Land needed for multi-purpose dams' projects has been expropriated on the base of this principle, but the government was obliged to compensate for land acquired.

For what concerns environmental damage, the history of the entire project is “a history of non-compliance”<sup>155</sup>. The NVDP implied loss of biodiversity, damaging the rich local flora and fauna. Among the damaging effects are sedimentation and siltation; the former implies that sediments that enter in reservoir waters are deposited on the surface increasing the level of the upper reaches of the reservoir. This causes flooding for the backwater effect and, in regard to the Sardar Sarovar Dam, such process decreased the dam efficiency. On the other hand, siltation is the result of silt deposited at the bottom of the reservoir which also decreases dam efficiency in power generation, it reduces the water storage capacity, and makes dam useless in the long term. Other side effects are waterlogging and salinization: the Indian Institute of Science estimated that 40% of the Sardar Sarovar Dam area would become waterlogged. Such area is characterized by black soil that is susceptible to waterlogging since it has a high capacity of water retention which would cause crops decline. Moreover, irrigation water

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<sup>154</sup> Lyla Mehta and Bina Srinivasan. *Balancing Pains and Gains. A Perspective Paper on Gender and Large Dams*. WCD Thematic Review 1.1 (b), March 2000., page 2.

<sup>155</sup> R. Berger, Thomas, 1993.

has more saline content whose addition causes salinization that in turn disrupts breeding of fishes. Many areas on the riverbanks have been affected by salinization due to dam construction. The Sardar Sarovar Dam have flooded over 32,000 hectares of land, 13,000 of which is forest, and 11,000 of agricultural land.

Flood waters held an additional problem, that is sand deposition which damages soil fertility. Crop failure have a more harmful impact on women for different reasons: they have less secure access to land<sup>156</sup>, and to recover the loss their domestic and productive tasks increase as well as the resulting physical and psychological burden.

Water-borne diseases increased, for instance malaria, filarial, cholera, encephalitis, goiter, gastroenteritis, etc. According to reports, increasing diseases are due to inadequate safeguard procedures in irrigation areas<sup>157</sup>. Fish supply, that is an essential food for tribal people in the area, has been drained due to irrigation, salinization, and plants destruction. Waterlogging makes lands infertile so that food and crops did not grow causing nourishment insecurity and starvation. Where the lands have been irrigated, salinization made drinkable water to decrease. All these aspects contributed and will contribute to the destruction of entire ecosystems. Dam construction works implies deforestation and cover loss, pollution of the water and groundwater depletion; and although they are the least worst consequences, it also implies landscape degradation, noise pollution and risk of fires<sup>158</sup>. Not to mention the loss of historical relics and artefacts in the submergences zones.

As it is evident, it is always the recurring reductionist model of *development*, entailing the detriment of the ecological *wholeness*, that is a model which refers to the interconnectedness of every elements of nature, including human beings.

The India's Ministry of Environment and Forests did not give an environmental clearance for NVDP until 1987, and also then it did not provide completed studies, since they would be defined *pari passu* with the construction. Needless to say, such

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<sup>156</sup> Lahiri-Dutt, Kuntala. *Large Dams and Changes in an Agrarian Society*. 2012 [www.water-alternatives.org](http://www.water-alternatives.org) Accessed 6 November 2016.

<sup>157</sup> Alvares, C., and R. Billorey. *Damning the Narmada: The Politics Behind the Destruction*. The Ecologist 12, 1987. <http://www1.american.edu/ted/ice/narmada.htm> Accessed 6 November 2016.

<sup>158</sup> *Dams construction on the Narmada River, India*. <https://ejatlas.org/conflict/dams-on-the-narmada-river-india> Accessed 7 November 2016.

approach did not allow a proper environmental impact study. According to the Independent Review of Sardar Sarovar Project established in 1991,

“Although the conditional environmental clearance did contain a schedule for the completion of the environmental impact studies by 1989, most of the studies were not completed by that year, many have still not been completed. Without proper data and studies, proper assessments of environmental impact could not be made and effective ameliorative measures could not be developed”<sup>159</sup>.

Regarding financial costs, it has been estimated that just one of the largest dam, the Sardar Sarovar Dam, costed about \$8 billion in 2010-2011, much more if compared to the initial \$1.25 billion estimated<sup>160</sup>; construction works are expected to be completed by the end of 2040.

Therefore, there is no surprise that due to huge social, ecological, and financial costs the NVDP encountered opposition since its early phases.

Lands affected by dams' construction required to be examined in order to establish the feasibility of the project, especially in regard of its environmental impacts. In April 1983, the Indian Department of Environment approved the project but claimed that more data must be gathered: issues about impacts on wildlife, health, waterlogging, fish culture, submergence of minerals, plant life-forest, etc., needed to be analyzed in depth for assessment<sup>161</sup>. Before the central government of India received environmental clearance, in March 1985 the World Bank confirmed its support in providing financing for the NVDP. It made a loan agreement with central government of India and the three concerned States of Gujarat, Madhya Pradesh, and Maharashtra to fund the Sardar Sarovar Dam and the canal, although its policy required that a country conducted such examinations before agreeing for financial help. According to such agreement, the World Bank recognized as PAPs only those whose villages would be submerged so that they would be entitled to R&R (Resettlement and Rehabilitation) policies. The loan consisted of \$450 million but the World Bank contribution to the project was not only a

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<sup>159</sup> R. Berger, Thomas, 1993.

<sup>160</sup> *Sardar Sarovar Dam (SSD), Gujarat, India.* <http://www.water-technology.net/projects/sardar-sarovar-dam-gujarat/> Accessed 13 November 2016.

<sup>161</sup> Philippe Cullet. *The Sardar Sarovar Dam Project: Selected Documents*. Ashgate Publishing, Ltd., 01 gen 2007.

monetary one. Its approval encouraged advocates of large-scale development projects to proceed, and enabled Indian government to obtain financing from other international actors, such as the Japanese companies Sumitomo Corporation, Hitachi, and Toshiba, which undertook a contract of \$183 million to supply six dam's turbines<sup>162</sup>. Local opponents and environmental organizations have strongly criticized the role of such institutions and corporations for not being able to evaluate the NVDP's social and ecological impacts. The World Bank together with the Indian government claimed that benefits from the Sardar Sarovar Project were far beyond human and ecological costs. It was supposed to irrigate 1.8 million hectares, to feed up to 20 million people, to provide drinking water for 40 million people, and supply hydropower for industrial, agricultural, and domestic use.<sup>163</sup> However, experts from the opposite perspective demonstrated how poor benefits resulted from dams built since the 1950s. Nicholas Hildyard, co-editor of the environmental magazine *The Ecologist* from 1976 to 1997, was also the co-author with Edward Goldsmith of a survey on *The Social and Environmental Effects of Large Dams* published in 1984<sup>164</sup>:

"No one who has studied these projects can seriously believe the claims of the dam promoters. Like all the other major dam projects in India I have studied, Sardar Sarovar has a history of grossly exaggerated benefits and downplayed costs. The cost-benefit analyses used to justify the project are fraudulent. The forces driving its construction are powerful political and corporate vested interests, not the needs of the people of India."

A Gujarati civil engineer, Ashyin Shah, who studied alternatives to mega-dam projects, defined the SSP "poor and outdated" and that

"it leaves unresolved the fundamental problems of the degradation of the river basin and the poverty of its people, and the water scarcity of the state of Gujarat."

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<sup>162</sup> Schenberger, Karl. Japan's Aid for India Dam Project Attacked by Environmentalists. Los Angeles Times. April 20, 1990. [http://articles.latimes.com/1990-04-20/news/mn-1413\\_1\\_dam-project](http://articles.latimes.com/1990-04-20/news/mn-1413_1_dam-project) Accessed 15 November 2016.

<sup>163</sup> Mc Cully, Patrick. *Cracks in the Dam: The World Bank in India*. Multinational Monitor, December 1992. [http://www.multinationalmonitor.org/hyper/issues/1992/12/mm1292\\_08.html](http://www.multinationalmonitor.org/hyper/issues/1992/12/mm1292_08.html) Accessed 15 November 2016

<sup>164</sup> Ibid.



**Figure 3:** Major Water Resource Projects in the Narmada Basin

Source: <http://umich.edu/~snre492/Jones/narmada.html>

He proposed small-scale and decentralized systems, for example rainwater harvesting, conservation of soil, and a more efficient use of already existing reservoirs, as a cheaper and fairer solution for Gujarat's draught problems<sup>165</sup>. Others proposed more socially and environmentally cost-effective projects based on development of smaller watershed, lift irrigation<sup>166</sup>, and smaller single-purpose hydro-projects involving localized basins to meet communities' needs.

In August 1992, an International Rights Panel visited the Narmada Valley to examine the R&R issue and discovered there was no solution to rehabilitate the most of PAPs, to regain the right proportion of lands and their previous standard of living. The Panel found that R&R policies would perpetrate "violations of the rights of tens of thousands of people"<sup>167</sup>.

<sup>165</sup> Ibid.

<sup>166</sup> Lift irrigation is a method of irrigation -in which water is not transported by natural flow (as in gravity-fed canal systems) but is lifted with pumps or other means.

<sup>167</sup> Ibid.

PROPONENT'S ARGUMENTS	OPPONENT'S ARGUMENTS
The irrigation of over 1.8 million hectares of land.	The flooding of the lands of 140,000 farmers for irrigation canals.
The provision of drinking water to 135 urban centres and 8,215 villages.	Disrupted livelihoods of thousands of farmers & fisher folk downstream.
The generation of over 200 megawatts (MW) of hydroelectric energy.	Most impact on indigenous peoples.
Flood protection for 210 villages as well as the major city of Bharuch.	Heavy ecological and financial burden on the region.
800 MW energy production for the state of Madhya Pradesh.	Loss of dense forests and the extinction of rare and endangered wildlife.
400 MW energy production for the state of Maharashtra.	Possible risk of tectonic instability and resulting earthquake activity. Increased danger of siltation, salinity & the loss of topsoil.
Potential irrigation gain for Rajasthan's over 75,000 hectares of desert land.	Increased health risks from waterborne diseases.
	80% of Gujarat's irrigation and water budget is diverted to the project at the cost of other water conservation projects.
	Lack of transparency in project planning and implementation.
	Lack of public participation.
	In 100 years or so sediment will fill the reservoir turning the \$10 billion dam into a useless waterfall.

**Figure 4:** Summary table of arguments. Source: *Medha Patkar's Environmental Activism and Professional Social Work in India*, Manohar Pawar and Venkat Pulla

### **2.1. The Sardar Sarovar Project: Resettlement and Rehabilitation Issue from a Gender Perspective**

As reported by the Anthropological Survey of India, 1985, India hosts 461 tribal communities speaking more than 150 idioms and over 225 subsidiaries dialects. The SSP alone was supposed to threaten about 248 communities among the 100,000

villages in Gujarat, MP, and Maharashtra<sup>168</sup>. The 92% of Adivasis (tribal people, original dwellers) lived in rural areas and about 63% in forests depending on surrounding environment for sustenance, and on strong tribal community ties. They received few influence from modern society due to limited access to social services such as education and health, or to developed infrastructures such as roads and communication lines. This obviously determined the tribal economy, based more on common property resources from agriculture than on wage labour.

Since its early stages, the Narmada Valley Development Project has been challenged by social and environmental costs, that is the resettlement and rehabilitation (R&R) question, the social adjustments, the preservation of tribal culture, ecological protection, but also the financial costs.

The most controversial part of NVDP, the massive dam Sardar Sarovar -the first dam projected and the only one collocated in Gujarat, consisted of a multipurpose project including not only the dam, but also power stations, transmission lines, canals, irrigation systems. The Sardar Sarovar Project (SSP) was supposed to be the last dam before Narmada makes it to the sea. As already said, the SSP would submerge about 37,533ha of land; it was initially estimated a mass displacement of 40,827 families (PAFs= project affected families); among these 4,728 were from Gujarat, 3,213 from Maharashtra, and about 33,014 from MP. Figures increased since then, 41,440 families are supposed to be displaced by the SSP<sup>169</sup>, adding significant costs to the project for acquisition of land and resettlement.

Dams were believed to solve droughts in the regions, the advancing of deserts, and to reveal the unexploited potential of irrigation. Politicians and advocates of the SSP defined it as the “Lifeline of Gujarat” for its being a new source of hydroelectricity, but the SSP was just one of the many dams of NVDP whose functioning depended upon one another.

The construction of the mega dam has threatened inhabitants of Narmada Valley, the *Adivasis*, who had been displaced by the creation of its reservoirs. When talking about displacement, the term refers to affected communities which are uprooted from their lands and relocated to different regions due to the building of big infrastructures which

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<sup>168</sup> Anupma, Jain. *Resettlement in the Narmada Valley: Participation, Gender and Sustainable Livelihoods*. London School of Economics and Political Science, 2005., page 17.

<sup>169</sup>Sardar Sarovar Project <http://www.sspa.gujarat.gov.in/newapproach.htm> Accessed 13 November 2016



could imply the dismantlement of pre-existing infrastructures, and the acquisition of the land in question. The displacement consists of two process entailing the forced movement of people from their places to another, and the reconstruction of their livelihood. People displaced by development-caused resettlement had no choice to stay since they lost their homes, their production systems, and productive sources. PAPs could be displaced in unwelcoming host regions increasing their insecurity, uncertainty, and causing their marginalization. There, their skills could be worthless and their culture under-appreciated. What is worse, the most of the time, affected people are not informed about project's plans and are not allowed to participate in the process as well as in the R&R policies, so that their needs are not matched<sup>170</sup>. It is of major importance that affected people became involved in project development as well as in the arrangement of R&R's policies to reduce harmful consequences and to balance opposing interests. The ARCH-Vahini (Action Research in Community Health and Development), a non-governmental organization that was involved in Gujarat's R&R operations, claimed:

“to ask the bureaucracy to prepare the detailed blue print of rehabilitation without active involvement of the PAPs and activists from the very beginning is to undermine the provisions of choice and preference guaranteed to them to safeguard their vital interests” <sup>171</sup>.

Social scientist Michael Cernea, in his *Impoverishment Risks, Risk Management, and Reconstruction: A Model of Population Displacement and Resettlement*, identified eight risks linked to displacement and resettlement policies, which are landlessness, joblessness, homelessness, food insecurity, marginalization, increased mortality, and loss of access to common property and social integration<sup>172</sup>.

Development forced displacement in the Narmada Valley caused social, economic, and cultural break to affected people. They had to endure marginalization and deprivation of their rights and entitlements. Displaced people lost their social relationships, their cultural identity, their means of livelihood.

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<sup>170</sup> Anupma, Jain, page 55.

<sup>171</sup> Ibid. page 58.

<sup>172</sup> Michael Cernea (2000) cited in *Forced Displacement: A Gendered Analysis of the Their Dam Project in India*. Ashtana, Vandana. Eastern Washington University, Cheney, WA.

A major issue to deal with was to define beneficiaries of R&R plans. There must exist categories under which locate groups in need of compensation, avoiding to leave aside other exposed people. Implementation of R&R would be hard to carry out if beneficiaries are not clearly identified and vulnerable people such as marginal farmers or illegal land occupants are disregarded. Underestimation of PAPs could delay R&R initiatives and make them worse. Another problem in defining the beneficiaries was how they were culturally perceived. For example, for what concerns the SSP, the PAP's were Adivasis, but they were perceived as tribal people isolated from *common* society and referred to different debates, like tribal development<sup>173</sup>. Even host populations should have been considered as beneficiaries, since their socio-economic ties have been disrupted as well as their land management, and competition due to limited resources<sup>174</sup>.

When in 1979, the Narmada Water Disputes Tribunal gave its judgement under the leadership of then Prime Minister Indira Gandhi, there were sixteen clauses to pilot the project and among these the clause XI was of importance since it defined terms which would become at the core of anti-dam opposition:

### **Clause XI - Directions Regarding Submergence Land Acquisition and Rehabilitation of Displaced Persons**

#### **Sub - Clause I – Definition**

1(1): "Land". The expression "land" shall have the same meaning as defined in the Land Acquisition Act, 1894 (thereinafter referred to as the Act) which states "the expression 'land' includes benefits to arise out of land, and things attached to the earth or permanently fastened to anything attached to the earth."

1(2): "Oustee". An 'oustee' shall mean any person who since at least one year prior to the date of publication of the notification under Section 4 of the Act, has been ordinarily residing or cultivating land or carrying on any trade, occupation, or calling or working for gain in the area likely to be submerged permanently or temporarily.

1(3): "Family" (i) A family shall include husband, wife and minor children and

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<sup>173</sup> Anupma, Jain. 2005, page 66.

<sup>174</sup> Ibid.

other persons dependent on the head of the family, e.g., widowed mother. (ii)  
Every major son will be treated as a separate family<sup>175</sup>.

The first definition tells us that even people living in the Valley who do not own titles to the lands could be subjected to compensation if the Project would displace them. The second term, "oustee", defines the period a person must have been working in the area that is supposed to be submerged, to be subjected to compensation policies. The third term is important for its limitations. It gives the chance to major sons to gain their own property in case of displacement; however, it does not refer to major daughters as separate family unit or workers who do not depend on a male head of the family. It is true that in India is exceptional to find a woman owning and working in a land on her own, but it is possible and the Tribunal's clause complicated women's rights to obtain a land<sup>176</sup>. Such case indicates how displacement's impact on women lives was subject to gender inequalities in a patriarchal society<sup>177</sup>.

The 1979 Tribunal's final order was innovative, indeed it granted to oustees to receive a land proportionate in quality and extent to the previous one and gave them the possibility to choose between moving to Gujarat or being rehabilitated in their homeland. However, according to Indian Constitution, individual States had the responsibility to create *ad hoc* R&R policies. In the end, the program was established only theoretically: the central government appointed Gujarat for creating rehabilitation policies and providing displaced families with money and lands, but Gujarati authorities focused only on the Dam Project works, seeking for financing.

The 2003 National Policy on Resettlement and Rehabilitation for Project Affected Families (NPRR-2003), defined clearly the beneficiaries, such as rural families, land labourer, farmers, etc. but some limitations and remaining obstacles must be considered. For instance, the government could not support illegal occupants, however, encroachers represented the majority of affected people.

The step following on from identifying categories of affected persons was to identify

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<sup>175</sup> Final Order and decision of the Tribunal Gazetted on December 12, 1979. <http://www.sardarsarovardam.org/document/pagecontent/NWDT-Awards.pdf> Accessed 19 November 2016

<sup>176</sup>Gates, Lindsay. *Dam Dissent: Protest Methods and Results in India's Narmada River Valley*. Scientia et Humanitas: A Journal of Student Research. Middle Tennessee State University. Spring 2012, page 63.

<sup>177</sup> Anupma, Jain, 2005.

the unit of analysis, that is who receives R&R benefits. In this case, the household represented the starting point, but benefits among members were disproportionately distributed according to the sex of the household head; sex and age of household members; size of the household (nuclear/extended). In most cases, men and sons were entitled to compensation while women and girls were not considered at all. As an example, the World Bank's Operational Directive 4.30 did not give the definition of "persons" in the clause "displaced persons", but only stated that "displaced persons should be compensated for their losses"<sup>178</sup>. Even if women are not mentioned, as well as men, they have been omitted during operations because there was no specification about them. For what concerns the SSP, R&R policy's subjects included major sons and widows, but not daughters.

Also in the latest R&R policy (2007), women are considered just in their role of wives:

"Land may be allotted in the joint name of husband and wife"<sup>179</sup>.

However, there is no instruction about solution of displacement gendered consequences. Indeed, from a gender perspective, it is possible to identify a gendered mode of displacement and rehabilitation which affect women. This is largely due to the division of work by gender that has been historically developed and had placed men in wage earning labour and women in land management. Women have been the first victims of centrally managed development projects as they disrupt women decentralized, informal, and participatory model of their everyday lives. Gender and class division defines people's relation with nature, and in turn, environmental changes define people's responses to it. Power, labour, and property distribution is reflected in gender differences, so that men and women experience the surrounding nature differently and have a different knowledge of it. As the development economist Bina Agarwal wrote, differences between men and women are

"[...] revealed in a range of practices, ideas, and representations, including the division of labor, roles, and resources between women and men, and the ascribing to them different abilities, attitudes, desires, personality traits, behavioral patterns"<sup>180</sup>.

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<sup>178</sup> Ibid. page 67.

<sup>179</sup>The National Rehabilitation & Resettlement Policy, 2007. <http://el.doccentre.info/eldoc1/k02a/28jun08toi1.pdf> Accessed 19 November 2016

<sup>180</sup> Agarwal, Bina. *A Field of One's Own: Gender and Land Rights in South Asia*. Cambridge University Press, 1994, page 51.

Rural women, particularly the poor ones, have a major role as providers, producers, and managers, which explains why they suffer more the loss of land. Patriarchal society lies at the base of power distribution differences, as well as of resettlement different consequences on women and men. Using as a reference the women's (affected by the dams' project) traditional and sustainable way of living, it is easier to understand how they face displacement, what resources they need to reach positive conditions, what are their needs for their everyday living.

In this way, it is possible to enumerate how many kinds of losses they sustain:

- Economic losses due to lack of access to traditional resources, which prevent them to carry on domestic duties such as gathering water, food, fuel, etc. Thus, they could not be able to provide for family care and weaken their position within the household. Such condition might influence their income by sale of animal products or, in the case they are relocated in places lacking traditional agricultural activities, women are disadvantaged in their skills based on land management;
- Social losses since they risk to be further marginalized because of their already "minor" status (in the context of a patriarchal society where the man has exclusive access to economic resources);
- Political losses due to the places where they are resettled. Since they are mostly of lower castes, in host upper caste communities they suffer violence and isolation<sup>181</sup>.

According to the dominant paradigm, women do not participate to development as economic growth, nevertheless another perspective based on sustainability and social justice sees women as subjects of development, due to their role in food production, land management, and ecological knowledge.

Such perspective, in the context of forced displacement must be considered to understand the presumptions at the basis of R&R outlining: household's income loss has been calculated in monetary terms, in fact project planners did not consider resettlement impact on women because they lacked knowledge of gender-specific activities. This way, compensation and benefits of R&R policies did not minimize

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<sup>181</sup> Anupma Jain. 2005, page 152.

impacts of displacement on individuals but on family as a whole. Women responsibilities have been disregarded in any role they hold, as home caretakers or heads of the family. In addition, compensation from R&R policy was supposed to be equally distributed among each family member, however men have been often the sole beneficiaries, for instance the husband or the eldest son, even if the head of the household was a woman. Such kind of implementation strengthened gender inequalities giving men more bargaining power to make decision, and more control over resources than female family members.

R&R designers should have considered the gendered way displacement affects people, they should have recognized the individuality within project affected categories, and formulated gender-specific provisions.

Advocates of the Project underestimated its social costs. Mass displacement and tribal livelihoods' destruction are serious consequences that have been hidden behind the benefits' attractiveness of a development project. Such context inspired people to undertake initiatives at the grass-root level and not to remain passive victims but active agents of dam resistance.

### **3. Protagonists of the Dam Opposition: Medha Patkar's Activism and the Narmada Bachao Andolan**

*"Vikas chahiye, vinas nahin!"*  
(We want development, not destruction)  
*"Hamara Gaon Mein Hamara Raj"*  
(Our village, our rule)

*"Dubenge Par Hatenge Nahin"*  
(We will drown but not move)

*"Narmada ki Gahti Mein Ladai Jaari Hai, Chalo Utho, Chalo Utho Rokna Vinash Hain"*  
(War is declared on the Narmada Valley, Rise up, Rise up, not doing so is destructive).<sup>182</sup>

In the Valley, unorganized protests immediately aroused and soon they gave birth to a

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<sup>182</sup> Slogans from NBA meetings.

bottom up social movement led by Gandhian groups active in the Narmada Valley. The anti-dam campaign attracted international NGOs alliances especially from developed countries, which undermined major NVDP's advocates, first of all the World Bank position in the Project. The first public manifestation was held by 14 villages in Gujarat and 9 villages in Maharashtra in March 1984, which marched for 209 km from Vadagam (Gujarat) to Kevadia Colony, demanding for revision of Gujarat's R&R policy which compensated just people who had land property, leaving aside landless and "encroachers"<sup>183</sup>. This event represented a watershed in the Valley struggle. Indeed, from that moment on several organized grassroots groups of local people began to meet for united actions of protest.

Who had the merit of merging all these movements around the same cause across the three states and beyond, was an incredibly courageous woman who challenged institutions and the central government, Medha Patkar.

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Medha Patkar was born on 1 December, in 1954 in Bombay, Maharashtra. Her family helped her to know early in her life social commitment and solidarity. As a matter of fact, her father, Vasant Khanolkar, took part of independence movement fighting against British rule; while her mother, Indu Khanolkar, has been an activist on gender issue<sup>184</sup> and formed part of *Swadhaar*<sup>185</sup>, a women's nonprofit organization established in Mumbai for helping women to self-support and encourage their greater inclusion in financial, education, and health systems.

Medha gained the Bachelor of Science degree from Ruia College and subsequently attended the Tata Institute of Social Science, gaining there a Master Degree in Social Work with specialization in community organization and development. After her studies, she dedicated 5 years to voluntary work in Bombay, and 2 years in tribal districts of East Gujarat. Then, she was offered a position at the Tata Institute when she decided to continue her education with a PhD program. However, she had to abandon it, due to events occurring then in India.

In the 1960s and 1970s, a debate ensued about modernization of West India,

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<sup>183</sup> Dwivedi, Ranjit. *People's movement in environmental politics: a critical analysis of the Narmada Bachao Andolan in India*. Institute of Social Studies. The Hague, March 1997.

<sup>184</sup> Firstpost. *Parliament must have honest, educated people: Medha Patkar's mother*. April, 3, 2014 [http://www.firstpost.com/printpage.php?idno=1463671&sr\\_no=0](http://www.firstpost.com/printpage.php?idno=1463671&sr_no=0) Accessed 19 November 2016.

<sup>185</sup> For more information: <http://www.swadhaar.org/>

especially in Gujarat where Large Dams Development Projects were about to be commenced. In 1969, the state of Gujarat proposed the construction of such big dams to the Narmada Water Dispute Tribunal, legitimizing them on the base that they would provide those impoverished areas affected by drought with drinking water, electricity, and irrigation. As it has already been said, in 1979, the Water Disputes Tribunal authorized the Narmada Valley Development Project (NVDP) with its over 3000 dams across the States of Madhya Pradesh (MP), Maharashtra, and Gujarat.

When in 1985, news about the NVDP spread around the country, Medha Patkar with some of her institute colleagues organized a trip to the Narmada Valley<sup>186</sup>. In that occasion, she noticed how local government was indifferent to the consequences of the Sardar Sarovar Project (SSP- the most controversial and largest dam) on affected people who had to leave their lands that would be soon submerged. Medha established a dialogue with people from the Valley, trying to discover how much they have been involved in the making process of NVDP. Residents of Narmada basin were farmers, Dalits<sup>187</sup>, and Adivasis, and Medha managed to gather them by methods of social action and community organization. They knew little or nothing about the project and its impacts, except that they would be displaced and rehabilitated. On this basis, the Department of Environment and Forest would not grant legal transparency for SSP if investigations were not conducted about public health, resettlement, and afforestation of affected land.<sup>188</sup> She settled in the Valley among tribal communities and decided to abandon her formal studies to devote herself to the Narmada people's struggle. She became a social activist, as well as her parents, instituting one of the major non-violent social movements in the world, the Narmada Bachao Andolan.

Medha worked to create a link between the government and the people from the Valley moving day after day from a place to another, from office to office, in most cases without answers to affected people's questions: "Whose development?", "At whose expenses?", "Could PAPs be properly compensated?". Medha understood that was crucial to broaden such the question beyond country's borders because affected

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<sup>186</sup> Aaron Crawford. Medha Patkar. Undated. <http://www.womeninworldhistory.com/imow-Patkar.pdf> Accessed 6 November 2016.

<sup>187</sup> "Dalits" meaning "oppressed" in Sanskrit is the name of the caste at the bottom of the Hindu caste system.

<sup>188</sup> Bruce Rich. *Mortgaging the Earth. The World Bank, Environmental Impoverishment, and the Crisis of Development*. 1994.



people were marginalized in different ways<sup>189</sup>:

- by reason of their identity bound by caste system;
- by their rural settlements far from the urban reality;
- by having no participatory place in the making process of the plan.

Medha managed to establish a dialogue with the government despite the many problems to communicate all the unanswered demands and issues to the authorities. When the opposition group and she decided to have a conclusive debate, the meeting chaired by representatives of the three affected states and the central one showed they have no solution to project consequences.<sup>190</sup> She tirelessly worked on obtaining access to documents issued by the World Bank or Government about the Project, in order to secure transparency between dam planners and local people.

In February 1986, Patkar initially set up in Gujarat the *Narmada Dharangrast Samiti*, that is the Committee for Narmada Dam-Affected People, with the purpose to not accept anything from the government until answers were given. Inhabitants of Narmada Valley in Maharashtra established the *Narmada Ghati Dharangrastha Samiti*. The former also involved people evicted in the early 1960s, when the government built an area for those who would work on dams and canals in Kevadia. About 5.000 people were displaced from six villages there<sup>191</sup> but this happened before Tribunal's award for displacement, so that they have never been compensated for what they have lost<sup>192</sup>. As Medha explains<sup>193</sup> when she met those formerly inhabitants of the new luxurious colony of Kevadia, they felt *cheated* by government since they received just the compensation for the immediate crop loss but promises such as "land for land" and rehabilitation were never complied, and no organization was helping them.

Both movements opposed the dam project of Sardar Sarovar dam, demanding for the right to straightforward information about consequences of dams' construction and floods, not to mention proper resettlement. Also in MP, a Gandhian movement was

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<sup>189</sup> Nilan Yu, Deena Mandell. *Subversive Action: Extralegal Practices for Social Justice*. Wilfrid Laurier Univ. Press, 10 December 2015.

<sup>190</sup> Fisher, William F. 1995, page 160.

<sup>191</sup> Dwivedi, Ranjit. *People's movement in environmental politics: a critical analysis of the Narmada Bachao Andolan in India*. Institute of Social Studies. The Hague, March 1997.

<sup>192</sup> Lindsay Gates, 2012.

<sup>193</sup> Patkar, Medha. *The Struggle for Participation and Justice: a Historical Narrative*. In Fisher, William F. *Toward Sustainable Development? Struggling over India's Narmada River*. M.E. Sharpe. Armonk, New York 1995.

formed with the name of *Narmada Ghati Nav Nirman Samiti* (Committee for the Renewal of the Narmada Valley)<sup>194</sup> and was active in the Nimad plains of Madhya Pradesh. A former state finance minister, Kashinath Trivedi, oversaw the group and led numerous *padayatras*<sup>195</sup> to create a network of villages to inform them about risks and progress of SSP<sup>196</sup>. In Gujarat instead, was active also the *ARCH-Vahini* (Action Research in Community Health and Development). The organization's aim was to defend Adivasis who did not possess written documents for lands, and to search for proper lands for their resettlement<sup>197</sup>. All this opposition organizations and groups merged together for Narmada cause, and officially became the Narmada Bachao Andolan (NBA or Save Narmada Movement) in 1989. Many women around the country allied with the NBA and supported its actions. Especially in Madhya Pradesh a women's forum of the Narmada Bachao Andolan was born -the Narmada Shakti Dal, to oppose the Maheshwar hydropower project, one of the many planned in the Narmada Valley, and launched by the State Government in 1975 with the purpose of generating electricity for industries. In general, NBA has been progressively more connected to women's organizations such as the NCW (National Commission for Women), the most important Indian organization defending women's rights. It participated in public meetings opposing Maheshwari Dam Project and to oppose *cash compensation* policy to induce women's displacement from their homes and lands.

Many non-cooperative actions have been led by Medha, and among these the 36-day march, in 1986, was critical. Many groups joined the *padayatra* protest against the NVDP and crossed several villages from MP to Gujarat dam site. Protesters proved Satyagraha's non-violence with their hands tied. Police suppressed violently the protest at Gujarati borders, they caned and arrested the marchers and teared women's clothes<sup>198</sup>. As Medha stated about the march's meaning, it was "a path symbolizing the long path of struggle (both immediate and long term) that they really had".

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<sup>194</sup> Judith Whitehead. *Development and Dispossession in the Narmada Valley*. Pearson, January 18, 2010, page 142.

<sup>195</sup> Long foot-march for social purposes.

<sup>196</sup> Visweswaran, Kamala. *Perspectives on Modern South Asia: A Reader in Culture, History, and Representation*. Wiley-Blackwell. May 2011, page 329.

<sup>197</sup> Judith Whitehead. 2010, page 142.

<sup>198</sup> Fisher, William F. 1995, page 166.

Then, thanks to innovations in information and communication technologies, a global political space emerged, and in the context of economic liberalization two important consequences came forward:

- on the one hand, connection between international institutions and India's government increased;
- on the other hand, the number of non-governmental organizations and civil society's movements grew and have begun to look for transnational networks of alliances to find a voice for environmental protection and human rights.

As a matter of fact, the World Bank has been initially the principal sponsor of NVDP, before withdrawing in 1993, while the NBA saw its ranks growing rapidly backed by international support.

Initially, protests were aimed at gaining better R&R policies, but soon Patkar and NGOs became aware of the greater problem of all the issue- the NVDP itself. In Gujarat, only a few villages among the several affected ones would be included in R&R packages that, besides, would not fixed project's deficiencies. For example, the Sardar Sarovar Project was supposed to provide an elevated amount of drinking water, which was the strong point of SSP. However, the Project left aside costs needed for infrastructures which would bring drinking water from the dam to villages<sup>199</sup>. Such circumstances led protests to change the opposition's object: from negotiation of R&R packages for fair rehabilitation to whole dam project opposition.

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In analyzing NBA movement, it is important not to be trapped in a dichotomy discourse which sees contrasting aspects such as globalization/localism, capitalism/degrowth, urban elites/tribal people, etc. which minimize “multiple oppressions for which the anti-dam movement's participants operated, that were about gender, caste, class, religion and even language”<sup>200</sup>. As a matter of fact, popular intellectuals such as Medha Patkar or the novelist Arundhati Roy, who contributed to give a framework to the movement at both macro-level and micro-level, are often criticized as political representatives of

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<sup>199</sup> McCully (301), cited in Athri Ranganathan. *Rethinking the Role of Popular Intellectuals in Social Movements: An Exploration of Medha Patkar and the Narmada Bachao Andolan*. Sociology Major, Class of 2016, Amherst College January 12, 2015.

<sup>200</sup> Bose (156) cited in Athri Ranganathan. *Rethinking the Role of Popular Intellectuals in Social Movements: An Exploration of Medha Patkar and the Narmada Bachao Andolan*. Sociology Major Class of 2016, Amherst College January 12, 2015, page 14.

NBA who degenerate in essentialist (/simplistic) discourses on environmentalism<sup>201</sup>. Instead, they went beyond such discourses internalizing Adivasis experiences and making their voice heard against dangerousness and destructiveness of Development Projects in India. Medha Patkar, Arundhati Roy, Baba Amte, and those who contributed in leading NBA demonstrations are what have been defined as “popular artists”<sup>202</sup>, since they re-presented like a portrait, rather than represented (which entail a sort of detachment) tribal affected communities’ experiences through a complexity of levels, ranging from the local one (with its caste, gender, class complicated nature), to the international one, that is necessarily essentialized in its nature but to which Indian local histories have been made accessible.

When Medha was asked if the actions of NBA were international in their scope, she answered:

“Development issues cannot be contained within national boundaries. In India, even though there is hardly any land to relocate people onto, the projects are on the fast track, and those decisions are being made not just in Delhi and Bombay but also in Washington and Geneva. When there are more and more such projects going forward, the people's sovereignty over natural resources and human rights are bypassed. So, it's essential that we reach the global centers of power to fight not just centralized planning, but privatization-based planning. We have had to fight that at the local and national level. We have to ally with friends across the world to know the companies and challenge the companies, we have to have joint plans and action”<sup>203</sup>.

In early stages of Narmada Bachao Andolan’s action against the SSP, it gained support from environmentalists, Gandhian activists, NGOs, intellectuals, students in the country and worldwide, as well as opposition by who accused them of idealism and romanticism that if on the one hand could attract media attention, on the other had no strategy to obtain mass support. Advocates of Development Projects accuse them of

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<sup>201</sup> Ibid.

<sup>202</sup> Ibid.

<sup>203</sup> Jensen, Robert. Damn the Dams: An Interview with Medha Patkar. February 24, 2004. [http://www.alternet.org/story/17954/damn the dams%3A an interview with medha patkar](http://www.alternet.org/story/17954/damn_the_dams%3A_an_interview_with_medha_patkar) Accessed 16 November 2016.

being anti-Gujarat and anti-development. In spite of this, during 1987 and 1988, Medha and her followers mobilized an impressive number of people from villages thanks to public meetings which gathered middle-class farmers, small farmers, and landless workers. It was no longer just tribal villages involved, but a heterogeneous group committed to the same cause. As Medha stated:

“The extremely different scenarios posed a major challenge from the point of view of using different strategies, skills, media, and idioms on the one hand, and bringing them together in a situation where the upper-caste landlords were used to using derogatory language when referring to the Adivasis. It was a challenge keeping them together in the movement. We were very much aware of the fact that social inequality and economic inequality could not be immediately mitigated and dealt with. [...] But we did publicly touch these aspects”<sup>204</sup>.

In 1989, when the NBA was born, local groups were at the core, but the movement brought together a broad cross section of supporters from all over the country. Now that the mass base had been reached, it was time to organized mass actions. Such groups defined their strategy of nonviolence and noncooperation, and as such the only weapon in their hands was to remain anchored to their forests, houses, and lands. Methods of direct actions used by Medha, were based on Gandhian non-violent *satyagraha* and *asahakar*. With the former meaning “holding on to truth”, while the latter non-cooperation, *satyagrhai* actions put forward by her were not simply condemnation, but they held a precise purpose and objective to be achieved. As well as Gandhi carried *satyagraha* for the freedom of Indian people, Medha carried *satyagraha* for the freedom of Indian people losing their native lands.

In October 1988, government of Gujarat declared that the site of dam building, headquarters in Kevadia and twelve neighboring villages were under Official Secret Act, 1923. Thus, any of the activists who violated the area were caned and arrested<sup>205</sup>. Several manifestations took place through Gujarat to oppose such repressive measures. Along with many other activists, social worker Baba Amte (well known for dedicating his life to those suffering from leprosy and to social work), studied project’s

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<sup>204</sup> Patkar, Medha. *The Struggle for Participation and Justice: a Historical Narrative*. In Fisher, William F. *Toward Sustainable Development? Struggling over India’s Narmada River*. M.E. Sharpe. Armonk, New York 1995.

<sup>205</sup> Dwivedi, Ranjit. 1997.

consequences and due to its commitment to the cause he became a leading spokesperson of the movement together with Medha Patkar. He settled on the river banks and joined the struggle. He helped to organize an event which would foment anti-SSP struggle and started NBA political campaign no longer limited to the SSP but referred to the predominant development patterns.

In August 1989, a meeting gathering more than 60 organization at Itarsi (MP) ended with the decision to perform a rally in order to arouse nation-wide awareness about Dams Projects implications. The rally was held on 28 September 28 in a town in the Narmada Valley, Harsud, which would be submerged by the SSP reservoir. The Harsud Rally message was against all projects devastating the environment and people's livelihoods and called for the adoption of a development model based on social justice and ecological sustainability. Solidarity to the rally came from over a hundred NGOs from abroad and achieved great success through media: Indian press, television, and radio reported the event as well as BBC, Time, and The National Geographic Magazine<sup>206</sup>. Harsud Rally contributed to the creation of a broader platform, led by the NBA, focusing on a wider range of issues instead of just R&R policies: the non-participatory process of Project's planning, social and ecological costs. The slogan raised by participants in that occasion was "*vikas chahiye, vinas nahin*" (we want development, not destruction). Special remarks must be made in relations to slogan used during NBA's demonstrations: conceived in local dialects, slogans had been a powerful instrument contextually and culturally speaking, around which people found awareness and a sense of belonging to a community. They brought with them not only "effective" and "accessible" words to a mainstream audience, but the much deeper ideas of self-determination, self-rule, and self-assertion.<sup>207</sup> NBA's strategy changed in order to aim at not only affected people's support but at a wider society's one, to bring awareness and to create a mass-backing movement against the disaster NVDP was perpetuating. In the occasion of Harsud Rally, Baba Amte said:

"Mohandas Karamchand Gandhi wrote: 'The Indian village, like a woman, carries the future of the nation in its womb.' Yet, our government is preparing to

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<sup>206</sup> Staffner, Hans. *Baba Amte: A Vision of New India*. Popular Prakashan, January 2000.

<sup>207</sup> Manohar Pawar and Venkat Pulla. Medha Patkar's Environmental Activism and Professional Social Work in India Mass Legitimacy and Myopic Structures. In *Subversive Action: Extralegal Practices for Social Justice* by Nilan Yu, Deena Mandell. Wilfrid Laurier Univ. Press, 10 December 2015.

wipe 500 Indian villages from the face of the heart. No one is allowed to arrange for the funeral of the future”<sup>208</sup>.

The years between 1990 and 1993 were rich in events; NBA intensified its battle and achieved important objectives. In March 1990, it held an eight-days collective fast in Bombay to oppose the impending submergence. At the end, the Chief Minister of Maharashtra, Sharad Pawar, promised that no one acre in Maharashtra would be submerged until affected people took part in the displacement and rehabilitation planning. Those words proved to be empty.

Once costs and benefits were examined in depth, the NBA realized how much incomplete they were: even the researchers who contributed to the Project’s assessment confirmed that, due to the unavailability of data their conclusions were conjectures. For instance, due to the lack of data from Narmada they had to use information about Tapi River, in Gujarat, for its having a similar hydrology to Narmada River.<sup>209</sup> Moreover, other kind of studies, such as environmental impact on the soil, were conducted just on one-fifth of the catchment area, when it was clear that consequences would be registered also in the downstream of the dam. A further weakness in the Project planning was R&R policy. The rehabilitation program was supposed to be completed and ready for implementation by 1981, when the Tribunal estimated the number of PAFs to be about 7.000. However, figures changed continuously: in Maharashtra, for example, the initial estimate was of 1.158 affected families, while few months later became 2.500. Today, the government approved the estimation of over 3.500, but the Tata Institute of Social Sciences reports about more than 5.000. Such changes showed how dam proponents had used improper data and, consequently, how unreliable was the estimation of ecological and social impacts. The first realistic and concrete assessment of the Project was realized when the World Bank decided to establish an Independent Review to overview the feasibility of the NVDP, in 1991.

In March 1990, ten thousand people from the Valley occupied the Bombay-Agra highway for 28 hours, demanding to the chief ministers of the three affected states and

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<sup>208</sup> Ibid. page 50.

<sup>209</sup> Patkar, Medha. *The Struggle for Participation and Justice: a Historical Narrative*. In Fisher, William F. *Toward Sustainable Development? Struggling over India’s Narmada River*. M.E. Sharpe. Armonk, New York 1995.

to the central government the revision of the entire master plan. The response was repression. The government announced that waters would rise and submerge their villages. The slogan of NBA became “*Doobenge par hatenge nahin*” (We will drown but we will not move). A program of *satyagraha* was initiated in Manibeli, which was the first village in dam area to oppose the dam. Several people ended up in jail, while Medha and her followers were banned from entering 36 villages. Government put forward *Section 144*, which banned gathering of more than four people, thus not allowing villagers to participate in Andolan actions<sup>210</sup>.

A critical moment in the NBA struggle was the “Long March” (*padayatra*) through the three states, started on Christmas Day 1990 and led by Medha Patkar. The march started from Narmada Valley, in the heart of MP and would continue to the dam site, 250 km away in Gujarat. It was organized with a specific objective: all the issues related not only to the Sardar Sarovar but also to the wider development issue must be brought on the streets in order to draw the country and world’s attention to their struggle. Through the march, protesters wanted the government to suspend the construction and to establish an independent, and not governmental review of the entire project. Protesters never arrived to the dam site since they met police and a pro-dam counter-rally at the border between MP and Gujarat. Gujarati government gathered 50.000 pro-dam activists and stationed 2.000 policemen along the frontier. NBA members set in motion their methods of passive resistance, sitting and staying, while others, among these Medha Patkar, threatened a hunger fast to death. The hunger strike lasted 22 days and Medha nearly died, her kidneys began to fail so that government claimed to establish a review. On 4 January, the marchers tried to bypass police line and suffered police violence; 125 of them, including Baba Amte, were arrested. The event caused sensation due to the different approaches, that of marchers’ non-violence with tied hands and that of inhuman response of police. Due to the violent treatment, Baba Amte fainted and suffered a heart attack. As might be expected, the government failed to fulfill its promises, consequently people decided to boycott government activities in villages, denied entrance to the villages to government official (except doctors and

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<sup>210</sup> Patkar, Medha. *The Struggle for Participation and Justice: a Historical Narrative*. Page 171 in Fisher, William F. *Toward Sustainable Development? Struggling over India’s Narmada River*. M.E. Sharpe. Armonk, New York 1995.



teachers), and protested against taxes' payment<sup>211</sup>.

The Long March showed how thousands of people have bravely faced repression by police on the border of Gujarat, even though activists were marching silently in peaceful protest. However, what media broadcasted, backed by Gujarati politicians, was a different story: of violent protesters who wanted to blow up the dam. Following the Medha Patkar 22-day fast to get a revision of the Project (which has never been conducted), the World Bank began to think about the Independent Review. Indeed, thanks to the wide international support, the campaign against the World Bank's support to NVDP grew as well as the pressure on other international sponsors. In June 1990, the Japanese government that had previously approved loans for turbines of the SSP (supplied by the Sumitomo, Hitachi, and Toshiba companies), cancelled the \$150 million loan, claiming that World Bank's assessment of social and environmental implications was inadequate. Pressure on the World Bank became untenable. In 1991, for the first time in its history, the World Bank established an Independent Review, a panel to assess the Sardar Sarovar Project. Chairman of the Independent Review was the former head of the United Nations Development Program, Bradford Morse, from which derives the name of "Morse Commission". The tasks of Morse Commission were:

- to evaluate R&R policies suitability;
- to evaluate the positive impact of Sardar Sarovar on the environment.

The investigation was completely autonomous and none of its members had worked or worked for the World Bank; the Institution just provided financial support, while the Independent Review managed the *modus operandi* on its own and maintained editorial control over the final report.<sup>212</sup> The Independent review visited the valley of Narmada many times, especially the dam, canal, and submergence areas. It met with experts of the Project and officials from the central government, among these the Minister of Water Resources, as well as others from governments of MP, Gujarat, and Maharashtra who emphasized benefits from NVDP. On the other hand, the Morse Commission also talked with NGOs opposing the dam's construction at all. It visited over a hundred tribal and rural villages in the Valley to listen to local inhabitants with

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<sup>211</sup> Nilan Yu, Deena Mandell. Subversive Action: Extralegal Practices for Social Justice. Wilfrid Laurier Univ. Press, 10 December 2015.

<sup>212</sup> R. Berger, Thomas. 1993.

the help of NGOs such as the Narmada Bachao Andolan or the Arch Vahini. Thus, all the materials and information collected were from different sources and both parts of the matter. The Morse Commission issued the draft report to the World Bank on 1 April, 1992.

It should be noted that in 1957 the International Labour Organisation (ILO) approved *Convention 107*, which was about indigenous or tribal oustee families who must be "provided with lands of quality at least equal to that of the lands previously occupied by them, suitable to provide for their present needs and future development"<sup>213</sup>. On 29 September, 1958, India ratified the convention. In 1980, for the first time, the World Bank designed a specific R&R policy: it defined rehabilitation as fundamental condition of displacement, so that affected people must regain *at least* their previous social and economic conditions. People affected by dam projects were included. In addition, in 1982, the World Bank established a policy intended exclusively for tribal people: traditional management of tribal lands must be respected as well as tribal people; their displacement should occur only if the State is able to safeguard such people through specific protective measures. At the time when loans were granted for the NVDP, such policy already existed.

The World Bank was following the worldwide changes of human rights perception, especially in regard of rural and indigenous people. In 1987, the United Nations World Commission on Environment and Development, the so-called Brundtland Commission (from the name of the Chairperson of the Commission, the Prime Minister of Norway Gro Harlem Brundtland), spoke about tribal people rights to their land and resources:

"These communities are the repositories of vast accumulations of traditional knowledge and experience that links humanity with its ancient origins. Their disappearance is a loss for the larger society, which could learn a great deal from their traditional skills in sustainably managing very complex ecological systems. It is a terrible irony that as formal development reaches more deeply into rain forests, deserts, and other isolated environments, it tends to destroy the only cultures that have proved able to thrive in these environments. The starting point for a just and humane policy for such groups is the recognition and protection of their traditional rights to land and the other resources that sustain their

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<sup>213</sup> Ibid.

way of life - rights they may define in terms that do not fit into standard legal systems. These groups' own institutions to regulate rights and obligations are crucial for maintaining the harmony with nature and the environmental awareness characteristic of the traditional way of life. Hence the recognition of traditional rights must go hand in hand with measures to protect the local institutions that enforce responsibility in resource use. And this recognition must also give local communities a decisive voice in the decisions about resource use in their area"<sup>214</sup>.

Over 60 million people in India depend on lands which have been cultivated by their ancestors. In regard to the Sardar Sarovar, rural people form the most of those forcedly displaced by its construction: forests are their houses, livestock and agriculture are their livelihoods. However, many of them are not formally entitled to those lands so that even if they lived there for generations, they are considered *encroachers* and have no right to compensation (except for Gujarat, but there are few affected Adivasis living in that area).

When the independent Review submitted the final report, there were too many flaws in the project: the uncertainties of environmental impact (mentioned in the previous paragraph), the failure to respect ecological and human well-being, the flaws in R&R policies in the three affected states. The Morse Commission recommended that further studies must be conducted before continuing the construction, and suggested the World Bank to revise its role in such venture. India did not comply with norms of Convention 107 ratified in 1985, neither with those of the World Bank about resettlement and rehabilitation. Thus, forced displacement resulting from the Sardar Sarovar construction had violated recognized norms of human rights. Yet, many factors contributed to the negative assessment of the Project: continuing Dam works implied too many risks, such as the waterlogging and salinization, the absence of land for rehabilitation, the health impact, etc. Yet, among these and most importantly, the lack of consultation of people living in the Valley of Narmada. With their knowledge, they would be able to suggest compensatory measures to counterbalance negative

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<sup>214</sup> *Our Common Future: Report of the World Commission on Environment and Development*, Chapter 4: Population and Human Resources. <http://www.un-documents.net/ocf-04.htm#III.3.3> Accessed 22 November 2016.

impacts. Instead, they had been ignored, which led to a strong opposition.

On 21 September, 1992, the *Financial Times* published a letter signed by 250 organizations from 37 countries, which demanded to the World Bank's President Lewis Preston the withdrawal from Sardar Sarovar Project involvement. The event demonstrated the international dimension that Indian dam opposition had reached putting at stake Bank's credibility. In March 1993, due to Morse Commission findings, and the extensive demanding resistance conducted by the Narmada Bachao Andolan, the World Bank withdrew its loan. With the end of Bank's involvement in the Project, the central government stated it would continue the NVDP construction on its own. By 1994, over 50% of Narmada Dam was completed, however, with international actors withdrawing their support from the Project, the central government was in difficulty and tried to negotiate alternative financing arrangements.



**Figure 4:** Picture taken from Harsud Rally.

Source: <http://www.livingfeminisms.org/story/glimpses-my-journey>

As violence of police forces escalated, violation of human rights were the order of the day as part of an increasingly repressive campaign promoted by state governments. Human rights abuses such as arbitrary arrests, illegal imprisonments, and beatings against people using nonviolent and noncooperative methods of resistance against the Project, attracted the Asia Human Rights Watch, which decided to send a mission in the Narmada Valley in 1992. The Mission revealed that in just in 1992, over 1,000

people in the Narmada Valley had been imprisoned. In the same year, the Environmental Defense Fund together with the Bank Information Center created the Narmada International Human Rights Panel to monitor human rights abuses. On 7 October, 1992, a report from the Panel revealed the failure to guarantee cultural, social, and religious rights; the Panel also denounced a police who shot to death a tribal woman in the Taloda Forest, during an authorities' attempt to displace people living there although it was land for resettlement<sup>215</sup>. Women activists were victims of police misconduct in a serious incident occurred on 22 April 1998. They were leading a peaceful *satyagraha* to protest against the Maheswar Hydropower Project. According to government estimates, 61 villages were expected to be submerged involving about 13,000 people; however, the NBA demonstrated how such figures were incomplete, not considering landless people and migrants who worked on those lands. Locals tried to undertake a dialogue with competent authorities a year before, but in vain. No information was provided to affected people about the extent of displacement and rehabilitation programmes. From 22 April 1998, local women performed a *satyagraha* at dam site, although it was placed under *Section 144*. Response to the protest was brutal; as reported by the NBA:

“[...] the policemen manhandled women protester who were present in large numbers. The policemen pushed and pulled women, tore up their clothes, raised their saris and blouses, their bundles of belongings were mercilessly thrown away. Women were beaten up and walked over by the police who pulled out their jewellery and abused them. This abuse and violence continued even after women were thrown into buses meant for taking them to the jail”<sup>216</sup>.

The next day, 23 April, another *satyagraha* was performed in the same site with the same response. Most of the protesters have been seriously injured, not to mention psychological consequences of women's abuses. The National Commission for Women carried out an inquiry and came to the following conclusion:

“1. The investigations so far reveals that violence was used extensively against peaceful demonstrators on 22<sup>nd</sup> and 23<sup>rd</sup> April 1998 at the Maeshwar Hydel

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<sup>215</sup> Udall, Lori. *The International Narmada Campaign: a Case Study of Sustained Advocacy*, Page 208 in Fisher, William F. *Toward Sustainable Development? Struggling over India's Narmada River*. M.E. Sharpe. Armonk, New York 1995.

<sup>216</sup> National Commission for Women. *Report of the inquiry in respect of violence, arrest, and use of force by police and others against women demonstrators at Maeshwar Hidet Project site on 22 and 23 April 1998*.

Project site. The violence was not provoked by self defense or used as means to control an unruly mob. This violence was perpetrated against people who were protesting peacefully [...]

2. this violence, accompanied by vulgar and sexual abuse, is a big blow to the empowerment of women who have, for the first time, come out of their homes to protect their right to life [...]"<sup>217</sup>.

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Between 1992 and 1993, Medha led groups of *Samarpit Dal* (*samarpit* means “giving voluntarily”, while *dal* “group”), that is people who prepared themselves to die for a cause, for a *jal samarpan* (sacrifice by drowning). Among the sites to be flooded, there was Manibeli, a village in Maharashtra, where several protests took place and met police repression. There, affected people refused to move waiting water to rise. The state’s response was arrests and beatings. Affected people were ready to sacrifice themselves. Such action forced government to accept the review of the project, even if the panel established by state was not able to verify the feasibility of the project and armed forces carried on to repress protesters in villages of Maharashtra and Gujarat<sup>218</sup>. In 1993, Medha Patkar began again to fast to pressure government to halt the Sardar Sarovar Project. On the 14<sup>th</sup> day of fasting she was arrested, and although a new promise of review was announced by the government. As a response to the Independent Review of the World Bank, the Indian central government undertook its own revision of SSP, made public in 1994. Although environmental problems were proved, it did not agree with Morse Commission urgency to halt the dam building so that the construction would continue. NBA did not stop to participate in international meeting and in 1997, they attended the first international conference against big dams in Brazil, and a multi-lateral conference backed by the World Bank involving NGOs, dam builders, and businesses<sup>219</sup>. From such meeting the World Commission on Dams (WCD) was created with the aim to carry on a massive research about dam building consequences around the world. Medha Patkar has been selected as Commissioner of WCD. The Commission represents today an important legacy resulting from NBA

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<sup>217</sup> Ibid.

<sup>218</sup> Smita Narula. The Story of Narmada Bachao Andolan: Human Rights in the Global Economy and the Struggle Against the World Bank. New York University Public Law and Legal Theory Working Papers. 17 December 2008.

<sup>219</sup> Gates, Lindsay. 2012.

activism in the Narmada Valley. If on the one hand the NBA enjoyed success internationally, struggle within India borders slowed. Following the withdrawal of the World Bank from the project, the struggle restricted to NBA, the states, and central government. In 1994, activists turned to the Court. NBA's attorneys based their petition on three legal arguments:

- project's unconstitutionality;
- violation of the equal protection clause of the Indian Constitution;
- violation by the government of people's right to reside and settle in any part of India.

In addition, they included the environmental threat<sup>220</sup>. Madhya Pradesh supported the petition since it did not want the dam height to be further raised as it would imply further people displacement and submergence of more lands within its borders. In 1995, the government agreed 80 meters of Sarovar height, notwithstanding this, in 1999, it made amends and gave permission for the dam to be raised to 85 meters. The author and activist Arundhati Roy did not accept Court's verdict and criticized it in her essay *The Greater Common Good*:

"Big Dams are to a Nation's 'Development' what Nuclear Bombs are to its Military Arsenal. They're both weapons of mass destruction. They're both weapons Governments use to control their own people. Both Twentieth Century emblems that mark a point in time when human intelligence has outstripped its own instinct for survival. They're both malignant indications of civilisation turning upon itself. They represent the severing of the link, not just the link—the *understanding*—between human beings and the planet they live on. They scramble the intelligence that connects eggs to hens, milk to cows, food to forests, water to rivers, air to life and the earth to human existence"<sup>221</sup>.

Roy's opposition and criticism to Court's decision resulted in the Supreme Court trying her for contempt, thus it imposed a punishment of one-day imprisonment with a fine of 2,000 rupees.

In 2000, final judgement to 1994 NBA petition was given: although in early stages of the Project's assessment errors were found, now there was no reason to cease the

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<sup>220</sup> Ibid. page 73.

<sup>221</sup> Roy, Arundhati. *The Greater Common Good*. IndiaBook, Bombay, 1999.

construction; moreover, every time the dam was raised five meters more, there must be a re-evaluation of affected people. The NBA pointed out that governments still tried to compensate PAPs with cash rather than lands, and that people affected by the dam at 90 meters had not been resettled in MP. In 2002 they asked for a halt until PAPs were rehabilitated and environmental planning was completed. The Supreme Court asserted the responsibility of the states to its oustees.

In 2006, the dam has been raised to 121,92 meters. Communities' ancient links has been disrupted, even if governments have responsibility to its oustees, there exist no studies on families or individual's condition following the resettlement and rehabilitation. As reported by the World Commission on Dams, displacement is among the major causes of increase in alcoholism rates and women abuse. As already proved, being R&R policies established by states, women rarely were given lands in their own rights, as their interests have been linked linked to the household. According to SSP opponents, the government ignored the issue about women rehabilitation, as well as the effects of resettlement on the society.

Even if the NBA managed to brought the matter to the attention of international audience and local governments, it failed in its ultimate objective, halting the dam building on Narmada River. The controversial debate about the Narmada Valley Development Project did not serve to stop its course.



**Figure 5:** Medha Patkar protesting against submergence. Pictur Domkhedi, Maharashtra, September 21, 1999  
by Harikrishna Deepa Jani



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Today, the Narmada Bachao Andolan is 28 years old, and in its history, it achieved many goals. Legally, it managed to halt dams' construction although not permanently; locally, it contributed to go beyond caste and gender division and gave a voice to the most marginalized people; while internationally it attracted support and increased awareness of environmental concerns. It became a model of localized resistance against the global paradigm of *mal*development.

Considering NBA objective in general, it is possible to discern a circular process: unorganized groups and then NGOs and NBA began their demonstrations demanding for better R&R policies. Then, the protest spread acquiring a more general target -the anti-dam opposition. NBA evolved from a simply campaign led by NGOs demanding for better rehabilitation to a proper social movement fighting for human rights, ecological protection, and alternative development. Narmada struggle was "more a movement for participatory democracy than simply a movement for adequate resettlement of the oustees"<sup>222</sup>. In addition, although the NBA was not born around gender interests there is no doubt it contributed to the subversion of patriarchal relations in Indian rural society. Due to women's participation in NBA actions, the organization created awareness about women's issue and gave them a voice in the making of the movement. Major public figures and representatives of the NBA won several awards for their contribution to promotion of human rights. Medha Patkar received *Right Livelihood Award* in 1991, *M.A. Thomas National Human Rights Award* from Vigil India Movement in 1999, *Deena Nath Mangeshkar Award*, *Mahatma Phule Award*, the *Green Ribbon Award* for Best International Political Campaigner by BBC, and the *Human Rights Defender's Award* from Amnesty International<sup>223</sup>.

Considering failures and victories of the Movement, some considerations must be made. Unfortunately, although hundreds of thousands of people are still waiting for resettlement and rehabilitation packages, NVDP works are continuing. For what concern the SSP, the dam has been raised up to 121,92mt. On 12 June, 2014, the Narmada Control Authority gave the permission to further raise the Dam to 138.68 mt, in addition to the building of bridge and gates. The works were supposed to be

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<sup>222</sup> Globalizing Dissent: Esand says on Arundhati Roy. a cura di Ranjan Ghosh, Antonia Navarro-Tejero, page 16.

<sup>223</sup> Medha Patkar <http://www.womensweb.in/articles/inspiring-woman-medha-patkar/> Accessed 23 November 2016.

completed in October 2016<sup>224</sup>. However, on the other hand, it contributed to transform the society and societal relationships from within. It created a political space in the most marginalized areas of Narmada Valley, it has made rural people self-confident and aware of social justice through resistance. It has shown that through collective actions it is possible to overturn even International Institutions initiatives, as happened with the World Bank, or make government to review its position.

The Narmada Bachao Andolan with other environmental, women's and Gandhian groups, established a National Alliance of People's Movements (NAPM), committed to ecological protection, livelihood protection, to fight poverty, and unsustainable development.

Movement's leaders, first of all Medha Patkar, or the Booker Prize winner Arundhati Roy have had an important role in shaping anti-dam mobilization, at a local level but also at an international one. They placed R&R problem in the context of a state pursuing development policies in the name of the *common good*, but serving the interests of capitalism and economic growth. For this reason, Patkar and Roy "framed the NBA as a movement across caste and class that, through its fight against the NVDP, is a fight against development nationwide and globally"<sup>225</sup>. They merged in one voice different local struggles and created solidarity network with organizations such as the Environmental Defense Fund (D.C.), the International Rivers Network (San Francisco), and Friends of the Earth (Japan), which has been useful in attracting foreign governments' attention to the issue<sup>226</sup>. When talking about Medha Patkar's ideology, it is fundamental to refer it to social justice, human rights, defense of underprivileged, and sustainable development. Her work through the organizational system of NBA served to bring issues such as state repression, forcible eviction, right to life, land acquisition, etc. to a wide range people's attention<sup>227</sup>. Her ideology has been put in practice through non-violent methods from Gandhian tradition of *satyagraha*. Strategies such as fasting, *padayatras*, *jal samarpan*, slogans, *rasta roko*

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<sup>224</sup> Sardar Sarovar Dam <http://www.sardarsarovardam.org/current-status.aspx> Accessed 24 November 2016.

<sup>225</sup> Athri, Ranganathan. *Rethinking the Role of Popular Intellectuals in Social Movements: An Exploration of Medha Patkar and the Narmada Bachao Andolan*. Sociology Major Class of 2016, Amherst College January 12, 2015, page 13.

<sup>226</sup> Ibid.

<sup>227</sup> Patil, Asha Ramagonda. *COMMUNITY ORGANIZATION AND DEVELOPMENT: An Indian Perspective*. PHI Learning Pvt. Ltd., 19 November 2012.

(roads blockade), or *gaonbandi* (not allowing government authorities to enter villages), served to gather a broader audience beyond the local one, in addition to raise awareness about development issues. Gandhian tactics symbolized the disconnection from centralized power, as well as non-cooperation with power's subjects. They served to shape NBA identity around the ecological and social justice causes, but above all they allowed activist to move beyond fragmentariness and obstacles from within the Valley – different caste, gender, status, segments of Valley population. NBA activists strongly worked to create participatory and people-centered instruments to revise development patterns. They opposed the centralization of global economy, capital- and technology-intensive projects, suggesting an alternative development model based on basic needs and local access to resources against the economic growth “at any price” and the consumer culture. Threats and pressure by State Governments and police forces through misinformation, arrests, beatings, and abuses, exacerbated the struggle of affected people for survival and support of such ideals. Nevertheless, coercive environment did not stop activists and locals to continue their protest. They tried to hold on their land, their traditional customs, knowledge, and to their community ties. When it was clear that NBA activism, despite the many objective reached, was limited against global elite interests, and ignored by government, the movement returned to focus on affected people resettlement rights. In any case, this process has been useful to motivate people resistance, the target's changes served to NBA survival and strength, to construct a local and transnational network, and to further criticism about development and sustainable forms of nature management.



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